DOCUMENT RESUME

ED 232 656 IR 050 281

AUTHOR Smalley, Topsy N.
TITLE Bibliographic Instruction for Undergraduates: An Example of a One-Unit Required Library Research Skills Course.
INSTITUTION State Univ. of New York, Plattsburgh. Coll. at Plattsburgh.
PUB DATE Mar 83
NOTE 116p.
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Academic Libraries; Assignments; Card Catalogs; Higher Education; *Information Retrieval; *Instructional Materials; Liberal Arts; *Library Instruction; *Library Skills; Periodicals; *Reference Materials; *Research Skills; Search Strategies; Undergraduate Students
IDENTIFIERS Library of Congress Subject Headings

ABSTRACT

A college level, one-unit library research skills course is required of all students as part of a general education program at the State University College at Plattsburgh, New York. The course emphasizes the presentation of learning experiences within the context of two conceptual structures: principles that underlie information access systems, and the distinctive discipline contexts of research processes and their modes of access in the social sciences, sciences, and humanities. In this report, the learning objectives of the course are discussed, and teaching techniques aimed at imparting personally meaningful learning are presented and explained. Extensive appendices provide examples of course materials, including the course outline, one variation of all weekly assignments, in-class worksheets, and a number of explanatory handouts used in teaching the course. The subjects covered include Library of Congress subject classification; library collections; use of the card catalog; access to background information; fact reference sources; access to the periodical literature; researching the social sciences, the sciences and the humanities; and the development of search strategies. (Author/ESR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED232656

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Bibliographic Instruction for Undergraduates: An Example of a One-Unit Required Library Research Skills Course

Benjamin F. Feinberg Library
State University College
Plattsburgh, New York

March 1983

IR052281

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert E. Burton

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Abstract

A college level, one-unit library research skills course required of all students as part of a General Education Program is described. The course emphasizes the presentation of learning experiences within the context of two conceptual structures: principles that underlie information access systems, and the distinctive discipline contexts of research processes and their modes of access in the social sciences, sciences, and humanities. Learning objectives are discussed, and teaching techniques aimed at imparting personally meaningful learning are presented and explained. Appended are examples of course materials, including the course outline, one variation of all weekly assignments, in-class worksheets, and a number of explanatory handouts used in teaching the course.

Preface

Basic features of the Library Research Skills course taught at the State University College at Plattsburgh, New York, grow out of considerable individual and group effort to respond to two academic initiatives. The first was a 1977 English Department proposal to devote a week of class time to library instruction in the basic English composition course; librarians subsequently developed materials and taught these sessions.[1] The second was the decision by the college General Education Committee, in consultation with librarians, that a one-unit course in library research skills be a required component of the general education curriculum. This recommendation was affirmed by the Faculty Senate and Library Research Skills (LIB101) was launched in the Fall semester of 1979.

A variety of materials were developed for use with the English course sequence and provided a set of experiences on which a one-unit course could build. In the initial years, Dr. Dennis Kimmage had overall responsibility for the development of the course and the coordination of the instruction program. Many of the materials still used in the basic LIB101 course reflect his originality, his often inventive adaptation of ideas to the format of a full semester course, and his direction over the contributions made by other reference librarians. Using the basic course as a foundation, many instructors have experimented with individual approaches to the course and assignments more tailored to personal teaching styles and preferred instructional emphases.

---

[1]This effort is described in Thomas J. Morrissey, "The Research Paper: What Not to Teach in Freshman English," The English Record 31 (Summer 1981): 22-23.

The variation on the basic LIB101 course described here is probably most distinguished by its use of a sequence of three class sessions (and their coordinated assignments) to teach distinctive features of research in the three broad areas of knowledge: the social sciences, sciences, and humanities. The sequence was conceived by John K. Clark[2] and worked out and implemented in the Spring of 1980 by several instructors; since then, it has been revised and refined. The approach it reflects (embedding learning of research tools within discipline context) held immediate and obvious appeal. Greater understanding of instructional elements contributing to its success did not emerge until later.

Teaching the sequence itself encouraged experimentation. Interest developed in devising other educational experiences that likewise held promise for forwarding learning on personally meaningful levels. Additional insight was gained as materials and instructional approaches were worked out to teach two upper-level literature researching courses, one in a humanities field (Plum), and one in a sciences area (Smalley). Structural differences between these two courses, and the educational theories that supported course material presentation, became matters for intensive exploration and discussion, and subsequent explication in published format.[3]

The variation on the basic LIB101 course presented here is, then, the child of many influences. Without the stimulating and supportive collegial environment provided by the college and the library, these ideas would never have found form in implementation. Gratefully acknowledged are the efforts

---

[2]Since mid-1982, Branch Librarian, Forest Park Library, Springfield, Massachusetts.

[3]See footnote 2, page 3 of text.

of all Feinberg Librarians associated with the course over the years; their work has contributed to a sound instructional foundation on which other efforts could build.

Report prepared by Topsy N. Smalley

Instructors currently teaching this variation of LIB101:

Stephen H. Plum

Cynthia M. Whitacre

Topsy N. Smalley

Introduction

The Basic LIB101 Course

Since the Fall semester of 1979, librarians at the State University College at Plattsburgh, New York, have taught a one-unit, required course in library research skills (LIB101). A part of the Advanced Learning Skills component of the college's General Education Program, the course requirement is to be met prior to the junior year (or, for incoming transfer students, soon after entrance). Class size has been limited to 35-40, and the course has been offered in sections that meet once a week for a full semester, or, at the discretion of the instructor, twice a week for a half semester. As many as 26 sections (approximately 900 students) have been accomodated in a single semester. The teaching load is currently shared by reference librarians (each typically responsible for two sections every semester), technical services librarians (each typically responsible for one section every semester), and a number of part-time instructors (librarians from the local community, each of whom teaches two sections per semester).

The course aims to impart independent learning skills, effective researching techniques, and understanding about efficient use of library resources. The many sections of the course share a good deal of commonality. Course objectives represent basic tenets mutually agreed upon by all instructors. Assignments consisting of problem-solving exercises in the use of the library are coordinated with each class session; in general, three variations of the weekly assignments have been developed to support the course each semester. Most instructors make use of a core body of these assignments and class materials. All instructors require a brief (8 to 10

item) selective bibliography on a topic of the student's own choosing as a final project. Instructors make up their own quizzes or midterms, but a single final examination is administered to all students *en masse*, reflecting a measure of agreement across instructors on desired, testable learning outcomes.

An evaluation of the course (in progress), using a variety of measures, indicates that it is successful in teaching concepts that are not, for the most part, acquired by students in other college work, and that these concepts tend to be retained over time.[1]

A Variation on the Basic LIB101 Course

An approach to LIB101 and its instructional materials has been developed which, though drawing on the basic core version of the course, varies to some extent from it. A number of fundamental notions about effective instructional approaches to a course of this type inform the structure and content of this variation. We have been influenced, of course, by our cumulative experiences as classroom teachers. In addition, we share a number of convictions about devising educational materials and teaching strategies that promote personally meaningful learning and also facilitate transfer of knowledge to newly encountered situations.

Educational theories that underlie and support many of our ideas have

---

[1]Evaluative measures consist of pretest/posttest comparisons, as well as a test for the retention of basic library use concepts (based on course objectives and administered to a large stratified random sample of students across college curricula comparing scores from those who had, and had not, taken the course). Still ongoing is a project in which a variety of scoring measures is being used to evaluate research paper bibliographies from students who have, and have not, had the course. Full description and results of the evaluative study are expected to be available in the near futu

been treated at some length elsewhere.[2] The current discussion is focused on an explanation of our application of a number of these principles in the course itself. The course materials included in the Appendix provide examples of how these approaches have been worked out in practice.

Assisting Students to Internalize Learning Experiences

A goal of all instruction is to facilitate within the student the internalization of patterns of thought that will support enhanced and independent learning. Proficiency in using library information systems well and to best advantage calls for developing student understanding of how information is organized for retrieval, and an appreciation of general search strategies and their modifications to solve particular problem situations.

Our approaches to teaching the course reflect attempts to avoid two instructional strategies which, in our judgment, act to retard meaningful retention learning: exclusive concentration on skills, and excessive focus on types of tools. Skill level learning and exposure to specific tools are certainly components of any bibliographic instruction effort, but insufficient in themselves to development of independence in the student. To gear verbal instruction or assignments to skills necessary to manipulation of particular tools, or sets of tools, engenders certain undesirable consequences.

---

[2] Topsy N. Smalley and Stephen H. Plum, "Teaching Library Researching in the Humanities and the Sciences: A Contextual Approach," in Theories of Bibliographic Education: Designs for Teaching, ed. Cerise Oberman and Katina Strauch (New York: Bowker, 1982), pp. 135-70. The merits of using the discipline context as cognitive structure for library use instruction has been further amplified by Plum ("Library Use and the Development of Critical Thought," New Directions for College Learning Assistance, in press). Although these two particular publications use upper-level courses as examplars, our approach to the LIB101 course reflects many of these same instructional principles.

First, the student is encouraged to believe that use of a tool and its peculiar format, or the particular skill being focused on, is, indeed, the substance of the learning experience. It is, of course, necessary that students learn skills and learn effective use of particular tools; this type of learning can be fairly easily implemented through student assignments and neatly tested. But assignments devoted to having students work through problems wholly on these levels creates in the student the cognition that manipulation skills and knowledge about particular tools is the substance of the learning. The incidentals of tool format and use are mistaken for course content. Skills and tool learning are not ends in themselves but, rather, the vehicles for independent, personal development of effective library inquiry. To encourage students to interpret specific tool use as the goal of an instructional experience is both deceptive and misleading.

Second, such an emphasis is undesirably restrictive. Focus on specific skills and tools tends to wed the student to particularities associated with *a* library, *a* reference collection, *a* card catalog, in their current form. Over their lifetimes, the vast majority of the information problems our students will solve will be confronted in *other* libraries, *other* reference collections, *other* card catalogs, and, surely, *other* variant modes of information access. Useful teaching strategies must somehow achieve in students the capacity to understand information problem solving in contexts that transcend a particular instructional environment. The desired aim must be to prepare students to recognize opportunities for productive use of broad varieties of information systems. The ultimate instructional goal must center on teaching principles of information access, rather than the use of a particular library and its resources.

Although the course as we teach it does not maximally achieve all ideal objectives, experiences with it are encouraging and affirm the judgment that the approaches are productive and worthwhile. The following discussion briefly summarizes the conceptual principles that inform the course as it is currently taught, and explains a number of the strategies used to implement these ideas.

Conceptual Structure

Instruction in library use has frequently been accomplished within settings provided by other courses (e.g., basic English or writing classes, upper-level research classes) and/or coincident to research paper assignments. Such associations can add elements of immediacy, relevance, and incentive to the instructional experience and, in upper-level courses, the instructor can assume certain levels of familiarity with the subject matter of a discipline and its literature.

LIB101 is part of the General Education Program and, therefore, part of the college-wide effort to provide all students with types of learning inherent in the concept of a liberal education. It is an independent course, not attached to, or a part of, any other. It is also a curriculum requirement that must be met by all students, including transfers. One consequence is that conceptual coherence for the instruction must be sought in the course itself. A second consequence is that the course must be responsive to highly diverse student characteristics: the 35 to 40 students in any given section may be enrolled in any major the college offers (or be, as yet, undeclared), and be at any college level (though the majority are underclassmen).

The conceptual structures we use accomodate these circumstances and,

we believe, turn them to advantage. The initial sessions of the course concentrate on conveying major principles that must underlie any system of information access and their implementation in the systems and tools available in this particular library. The second part of the course builds on those understandings; using discipline context for its conceptual structure, it exposes students to some of the distinctive features of researching in the social sciences, as opposed to researching in the sciences, as opposed to researching in the humanities. The final project (the "Topic Tracers," and the brief selective bibliography they generate) is introduced midway to provide a personal vehicle for individual application of course content. The conceptual structures offer frameworks for the development of personally meaningful learning, as well as opportunities to understand information organization and its access in ways that go beyond the intricacies of particular tools and the technicalities of skill implementation. The emphasis on nurturing thoughtful approaches to information access across all disciplines supports the general education intentions of the college's overall curricular objectives.

Conceptual Introductions to the Assignments

Each assignment is preceded by an introduction that aims to set the learning experience which follows into conceptual context. Modeled on the advance organizers advocated by Ausubel,[3] they have a twofold purpose: to reinstate past learning, and to present the superordinate concepts which

[3]David P. Ausubel, "Cognitive Structure and the Facilitation of Meaningful Verbal Learning," Journal of Teacher Education 14 (June 1963):217-22; and David P. Ausubel, Joseph D. Novak, and Helen Hanesian, "Cognitive Structure and Transfer," in Educational Psychology: A Cognitive View, 2nd ed. (New York: Holt, Rinehart and Winston, 1978), pp. 163-204.

the assignment's exercises then implement. The goal is to enable the student to understand the connection between past learning and the ideas being newly presented, and to apprehend and appreciate continuities underlying particular processes. The introductions are written to emphasize the general-level concepts of which the specific exercises are illustrations, and to encourage student understanding of principles beyond the specific mechanisms of their application in the working out of the assignment.

Closing with Thought Questions

Nearly every assignment closes with a thought question requiring a brief student essay. Questions or problems posed are framed to have the student reflect about the processes just worked out, incorporating those into some structure of more generalized understanding. The aim is to promote learning that becomes meaningful on a personal level for each student. Typically, the thought questions confront the student with the necessity of extracting from the assignment's more structured learning some set of essential elements to apply in solving or discussing some other situation. The essays also, of course, afford the instructor continuous opportunities to monitor student incorporation of learning on this level.

In-Class Worksheets, Overhead Transparencies, Handouts[4]

The conceptual structure informing the early sessions is comprised of the principles that underlie information access systems and their application in the library. In-class student worksheets have been devised for use with each of these sessions. The worksheets have several objectives. Their

[4]Copies of in-class worksheets, and a number of the handouts, are included in the Appendix.

overall aim is to present the learning materials in ways that emphasize the structure, functions, and interrelationships of the diverse components which make up systems of information access. The effort is to convey understanding of specific parts of those systems without sacrificing appreciation of inherent complexities and their power. Many of the worksheet pages have been reproduced as overhead transparencies. These allow the instructor to introduce and explain concepts using materials students also have in hand, and provide the opportunity to solicit and discuss class responses to the questions the worksheets pose. Additional transparencies are used to expand on or clarify the material presented, and to illustrate other applications. In-class worksheets and the transparencies reflect a consistent instructional aim to promote student recognition of basic structures and their functions, and seek clarity of presentation and suppression of unessential detail.

Explanatory handouts are coordinated with many of the weekly assignments and are rather diverse in nature. Some are standard library guides (e.g., to finding book reviews). Some review and illustrate basic ideas, often in condensed fashion (e.g., an explanation and simple flowchart of general search strategy; a comparison of basic structural differences that distinguish the research literatures of the social sciences, sciences, and humanities). Some explain or define particular tools, or types of tools (e.g., using Essay and General Literature Index; functions and features characteristic of various types of fact reference sources). The handouts provide a useful point of referral for the student engaged in working through an assignment; together with the in-class worksheets and the assignments, they make up a fairly comprehensive set of explanatory materials helpful to course review.

Early Introduction of the Final Project and the First Consultation

Work towards the final project is introduced relatively early in the course, typically in the fourth session. In addition to the regular weekly assignment (which is relatively short), students are given the first part of a search strategy assignment (Topic Tracer Part I) which has them locate background information on their topic, use knowledge gleaned from the background sources to better focus the topic, and identify and cite a relevant, recommended key work. An example of these initial search steps is presented in class, and on a sheet attached to this Topic Tracer.

Students frequently elect to use the project assignment to identify and evaluate the sources they require to accomplish a research assignment in another course. Final projects done in the context of purely personal pursuit of a topic are equally successful and probably more common.

The aim of introducing the final project at this stage in the course is to encourage student discovery of productive independent application of learning. Upon completion of the first Topic Tracer (as is the case with the second), students meet independently with the instructor--typically, a 10 to 15 minute session--to present their search results and to discuss any problems they may have encountered. The consultation session, though brief, offers the instructor the opportunity to confer with the student about particular sources chosen, to suggest and illustrate alternative approaches, and to review the topic selected. Students bring with them to the consultation the relevant, recommended work they have identified; frequently, the work itself provides an excellent way of eliciting from the student a more focused topic statement, and is on hand to interpret or explain difficulties the student may have had in citing it. The student retains the Topic Tracer,

and in the next assignment, uses that focused topic to explore appropriate indexing and abstracting tools for additional relevant materials. The Topic Tracer is not graded at this point. Consideration of the quality of the entire search process enters into judgment of the final project, which consists of both parts of the Topic Tracer and the selective bibliography they generate.

The Social Sciences, Sciences, Humanities Sequence

Discipline context is the conceptual structure that informs the latter part of the course. Specific tools and evaluative techniques are introduced and illustrated in the context of the distinctive, discipline-determined features of the processes of inquiry and the structures of research literatures and their access. Presenting specific tools and their uses within discipline context is meant to facilitate student understanding of their formats and peculiarities as functional components of research processes. Two objectives are served by incorporation of the use of tools as representatives of types serving various functions for distinctive disciplinary areas. One, student learning is focused on the important characteristics of research process and the contribution the particular tool makes. This acts to counter the natural, but misleading, tendency to interpret skills in tool use as ends in themselves; the cognition that the intricacies of tool use are equivalent to course content is thus actively discouraged. Second, through being exposed to representative tools and their functions in various areas of knowledge, the student develops a set of reasonable expectations that these types of tools should exist, and can be used to solve other information problems. Teaching tool use as part of distinctive

aspects of research process contributes to student capability to transfer learning to new situations. It actively encourages the student to anticipate that certain types of helpful tools exist, and fosters assurance that they can be accessed and made to work.

Alternative Assignments

In the sequence of classes on researching in the social sciences, sciences, and humanities, students are offered the choice of doing either the regular, structured assignment, or a more open-ended alternative. The alternative assignments require the student to go through the same sequence of research steps, but the subject of the search is the student's choice of topic, rather than the instructor's. The alternative used most is that for the social sciences, as student topics frequently concern social problems or issues. Students may freely choose whether to do a structured assignment or its alternative. Many feel understandably more comfortable with the regular assignment and its more ordered set of expectations. The alternatives are somewhat more challenging, but deliver the bonus that the student is continuing to search for materials that can be incorporated into the final project.

Several instructional advantages are associated with the use of the alternative assignments. They forward student learning on quite independent levels. If the student is coordinating the LIB101 search with an assignment in another course, the alternative can be directed toward meeting an immediate need. Their relative openness is responsive to the diversity of student background, interest, and preparation in any LIB101 section. With the choice entirely based on student preference, the underclassman can use the alterna-

tive to explore sources and identify materials for the final project. The alternatives also accomodate the higher expectations of the upper-level student that the research process respond to a greater depth of substantive knowledge in a discipline. A number of students will choose to do two, or all three, of the alternatives, challenged by the notion that their topic can be usefully approached from a variety of perspectives.

Evaluation vs. Relevance; Topic Tracer Part II; The Second Consultation

A thread that pervades many of the course sessions and assignments is that development of an ability to identify materials relevant to a topic is the first step of researching, and must be followed by an evaluation of those same materials. This is accomplished in a number of ways. From the early sessions on card catalogs (where students are introduced to bibliographic clues useful in preliminary judgment of a work), through the Topic Tracer Part I (which includes identification of a relevant, recommended work), students are taught to be attentive to interpreting evaluative information present in access tools and reference sources. In the social sciences, sciences, humanities sequence, evaluation is presented in discipline context; students are exposed, for example, to the role played by the selective bibliography in the social sciences, the function of the review publication in the sciences, and the place of the book review in humanities research.

The second part of the Topic Tracer, distributed toward the end of the course, provides a structure for completing the search for materials on the student's topic, incorporating materials located through other assignments, including the alternatives. After completing Topic Tracer Part II, the student has a second consultation with the instructor. Typically, this

conference emphasizes approaches to evaluating the materials the student has identified as relevant. One instructor uses group conferences (meeting with 3 to 4 students in half-hour sessions) for student presentation of search results; the groups become forums for discussing the searches as reflective of distinctive features of the various research literatures.

Topic Tracer Part II closes with a student essay reflecting on the meaning of the entire search process. The essay encourages the integration of various search components into an understanding of the search process as a whole, and its application by the student. The selective bibliography (turned in with the two Topic Tracers) reflects the student's choice of materials judged to have relevance and quality for research on the particular topic. The selective bibliography also requires that the student write a descriptive annotation for one of the publications included, and an evaluative annotation for another. The annotation requirement promotes thoughtful interaction with the actual source materials, and the more thorough application of evaluative techniques in at least one instance.

APPENDIX

Table of Contents

Item	Page
Course Outline	A 1
Class Information Sheet	A 2
ORIENTATION	
In-class Worksheet	A 3-4
Assignment	A 5-7
INTRODUCTION TO CARD CATALOGS	
In-class Worksheet	A 8-11
Assignment	A12-17
Handout--Writing Bibliographic Citations: Some Basics	A18
SUBJECT SEARCHING IN THE CARD CATALOG	
In-class Worksheet	A19-21
Assignment	A22-27
Handouts--Subdivisions: Explanations and Examples	A28
Searching the Subject Card Catalog	A29
ACCESS TO BACKGROUND INFORMATION	
Assignment	A30-32
Topic Tracer Part I	A33-36
Handout--Search Strategy	A37-38
FACT REFERENCE SOURCES	
In-class Worksheet	A39-41
Assignment	A42-46
Handout--Selected Types of Fact Reference Sources	A47-48
ACCESS TO PERIODICAL LITERATURE	
Assignment	A49-52

ACCESS TO PERIODICAL LITERATURE (continued)

Handout--Selective Subject Guide to Indexing and Abstracting Tools.....A53

RESEARCHING THE SOCIAL SCIENCES

Assignment.....A54-57

Alternative Assignment.....A58-62

Handout--Annotations and Abstracts: Definitions and Examples...A63-64

RESEARCHING THE SCIENCES

Assignment.....A65-68

Alternative Assignment.....A69-73

RESEARCHING THE HUMANITIES

Assignment.....A74-77

Alternative Assignment.....A78-82

REVIEW OF SEARCH STRATEGIES

Topic Tracer Part II.....A83-87

Handouts--General Search Strategy Compared with Research Strategies in the Social Sciences, the Sciences, and the Humanities.....A88

The Flow of Scholarly Communication, Means of Access to that Literature, and the Evaluative Process.....A89

(A 1)

LIB101 Library Research Skills: Course Outline

Session	Content
1	ORIENTATION Course information. Introduction to Library of Congress (LC) classification system; relating information problems to LC classifications. Distinct collections of materials in Feinberg Library.
2	INTRODUCTION TO CARD CATALOGS Card catalogs as access tools. Distinguishing between Author/Title and Subject Card Catalog searches. Filing rules and reading and using LC call numbers. Principles of bibliographic citation writing for books.
3	SUBJECT SEARCHING IN THE CARD CATALOG Library of Congress Subject Headings as the authority list governing subject heading structure in the Subject Card Catalog. Identifying, understanding, and using subdivisions, and cross references between subject headings. Broadening and narrowing scope of subject searches. Subject heading filing arrangement; use of tracings.
4	ACCESS TO BACKGROUND INFORMATION and INTRODUCTION TO SEARCH STRATEGY Location and use of background information; form subdivisions for accessing background information sources. Topic Tracer Part I: selection of topic for final project; narrowing and defining the topic. Sign up for consultations.
5	CONSULTATIONS ON TOPIC TRACER PART I Meet with instructor at designated time to review work accomplished on Topic Tracer Part I.
6	FACT REFERENCE SOURCES Location and use of fact reference sources, e.g., almanacs, atlases, directories, handbooks, statistical sources, yearbooks, gazetteers, biographical sources; form subdivisions for accessing fact reference sources.
7	MIDTERM EXAMINATION
8	ACCESS TO PERIODICAL LITERATURE Types of periodicals. Indexing and abstracting tools: what they make accessible, how they function to organize scholarship and make it retrievable; explanation of organization given periodicals in this library and microform formats.
9	RESEARCHING THE SOCIAL SCIENCES Search strategies for the social science literatures. Selective bibliographies and their functions. Specialized sources of social science information, e.g., government documents, Resources in Education, New York Times Index.
10	RESEARCHING THE SCIENCES Search strategies for scientific literatures. Review publications and their functions. Purposes of citation indexing and use of Science Citation Index.
11	RESEARCHING THE HUMANITIES Search strategies for humanities literatures. Indexes to collected works and Essay and General Literature Index; function of the book review in humanities research and book review indexing tools.
12	REVIEW OF SEARCH STRATEGIES and APPROACHES TO EVALUATION Comparison of search strategies. Review of methods for evaluation of relevant materials for scholarliness and quality. Topic Tracer Part II: completion of the search process; instructions for selective bibliography. Sign up for consultations.
13	CONSULTATIONS ON TOPIC TRACER PART II Meet with instructor at designated time to review work accomplished on Topic Tracer Part II.
14	REVIEW Summation of major course content. Course evaluation.
15	FINAL EXAMINATION

Feinberg Library/PSUC

Smalley (A 2)

PHONE:
564-3180

OFFICE:
331 Feinberg

LIB101 Library Research Skills: Class Information

Course Description

Library Research Skills is a one-credit course designed to help you develop independent learning skills, researching techniques, and understanding about efficient use of library resources. The course meets once a week and includes lectures, discussions, and practice in the use of the library. An assignment is coordinated with each class session; these problem-solving exercises reinforce course content and provide you with personal learning experiences.

Required Materials

The book required for this course is a style manual: Kate Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations (4th ed. Chicago: University of Chicago Press, 1973), available in the bookstore. You will use this style manual as an authoritative guide to understanding and writing bibliographic citations in this course. You will also find it an invaluable handbook for preparing and writing papers for many of the college courses you take.

You will also want to have a notebook, or folder, in which you can keep handouts, your assignments, and other materials from this course for reference and review.

Grades

Letter grades (A,B,C,D,E) are used in this course. Your final grade will be based on: 1) Your performance on weekly assignments (40%); 2) Your Topic Tracers and selective bibliography (the final project) (25%); 3) Your midterm examination (10%); 4) Your final examination (20%); and 5) Your general effort in the course (5%). You cannot pass this course unless you do the assignments, including the final project, and take the examinations.

Attendance

A one-credit course has a limited number of class sessions, and each meeting is important: each involves presentation of new materials, new information, and a new assignment. You need to understand the content of each class before you can do that week's exercises. Attendance will be taken each week, and your record of attendance will be weighed into your final grade. You should notify me promptly if some event entirely outside your personal control prevents you from attending a class session.

Assignments

You will receive a new assignment at each class session. *COMPLETED ASSIGNMENTS ARE DUE BY 5 PM ON THE FOLLOWING THURSDAY*, though you may, of course, turn them in earlier. *DROP OFF COMPLETED ASSIGNMENTS IN THE BOX LABELLED FOR THEM IN MY OFFICE* (if my office is closed, slip them under the door). *YOUR ASSIGNMENTS MUST BE COMPLETED AND TURNED IN ON TIME.* A late assignment will be penalized by 10% if it is turned in anytime after the due date and before the next class session. Assignments turned in anytime after the immediately following class session will be given a zero; I will, however, correct and comment on them (so you can get feedback on your work). If you miss a class session, it is your responsibility to obtain that week's assignment from me and complete it by the due date.

Doing Your Own Work

You will learn in this class in proportion to how much thought and effort you put into it. *YOU ARE EXPECTED TO DO YOUR OWN WORK.* If you have problems, please see me and we'll talk them over. I am interested in your work, in your thoughts, in your level of understanding. You will be learning a set of personal skills so that you can make the most of information systems--now, and in the future. You cannot personally assimilate the understanding and skills this course teaches if you do not do the assignments strictly on your own.

OFFICE HOURS:
Thursdays & Fridays
11 am - 12 noon

TNS S83

An example of one instructor's class information sheet

ORIENTATION: IN-CLASS WORKSHEET

In some sessions of this class, you will get in-class worksheets. These are for your own use in class, to help you understand the material covered. You won't turn them in. Use them for making notes, and to verify that you are understanding what is talked about. You will probably want to keep them for reference and review.

I. Library of Congress (LC) Classification System

Uses a letter or letters to indicate subject categories

For example: Q is used for science
QE is used for geology

Numbers and letters are used to subdivide classes

For example:

class	Q	Science
subclass	QE	Geology
subdivisions	QE 351	Mineralogy
	QE 420	Petrology
	QE 701	Paleontology

Brief Outline of LC Classes

NOTE: This is an abbreviated outline. In doing your Orientation assignment, use the more detailed outline on page 1 of Feinberg Library Guide #1.

History
- A General works
- B Philosophy; Psychology; Religion
- C Auxiliary sciences of history
- D History: General & non-American
- E-F History of America

Social Sciences
- G Geography; Anthropology; Folklore
- H Social Sciences
- J Political Science
- K Law
- L Education

The Arts
- M Music
- N Art
- P Language & Literature

Science & Technology
- Q Science
- R Medicine
- S Agriculture
- T Technology
- U Military Science
- V Naval Science

- Z Bibliography

You can use the LC classification system to identify where you might browse to find books on a subject. For example:

1. Suppose you wanted to browse through books about drawing and painting.

   What LC classification is given to books on this subject? _____

2. Suppose you wanted to find books about how to take notes in class and study for tests.

   What LC classification is given to books on this subject? _____

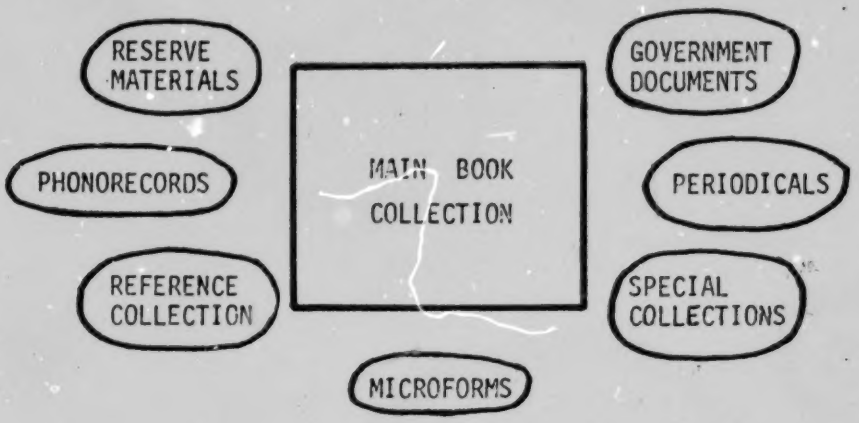
3. Suppose you wanted to find books about the best types of fertilizers to use to produce high yield crops.

   What LC classification is given to books on this subject? _____

A 4

II. Collections in Feinberg Library and Their Locations

A library is a system of interrelated collections. The bulk of this Library's materials are in the main book collection. There are other collections, however, which are separated from the main book collection. The materials in these separate collections may not be arranged by the LC classification system but instead according to some other organization (e.g., alphabetically by title).



When you begin to use a library that is new to you, you always want to determine which collections are kept separate from the main book collection, how materials in these are arranged, and where the collections are located.

When you take your tour of Feinberg Library, I suggest that you make notes below about the collections as they are explained to you. I'll get you started with notes about the first ones I've listed.

Collection	Notes	Where Located
Main book collection	*LC classification used*	
	Books in classification A through F	*1st level*
	Books in classification G through P	*2nd level*
	Books in classification Q through Z	*3rd level*
Periodicals	*Arranged by title of periodical; grouped by*	*all on 3rd level*
	whether bound, unbound, or on microform	
Microforms		
Reference Collection		
Government Documents		
Reserve Materials		
Phonorecords		
Special Collections		

Feinberg Library/PSUC LIB101 (A 5)

Name _____

Section _____ Instructor _____

ORIENTATION

Introduction

The collections in a library are organized according to certain principles that, over the course of time, have proven useful for facilitating access to the information contained in those collections. All libraries organize their book collections according to some classification scheme, usually one that groups books into subject categories. For a variety of reasons, libraries may also separate certain types of works, or subject groups, from the main book collection. Public libraries, for example, have children's collections; large university libraries often have departmental subject collections; and many libraries separate their periodicals (journals and magazines) from the main book collection.

This assignment is designed to acquaint you with how collections in Feinberg Library are organized. Exercise I introduces a general, but often fruitful, approach to locating materials by subject. Exercise II has you identify collections in the Library that are separate from the main book collection. In succeeding assignments, you will develop methods for more precisely locating books and other materials to answer specific questions and information needs. Exercise III asks you to think about the processes you have gone through, and to draw some conclusions based on your experiences.

Exercise I: Using the LC Classification System

These problems have you explore ways of finding answers by using the Library of Congress classification scheme to identify a general subject area where books on that topic are located.

Directions: 1) Analyze each problem to determine its primary subject content. Relate that subject to the appropriate letter or letter group of the Library of Congress classification scheme (see page 1 of Feinberg Library Guide #1).

2) Indicate on what level of the Library you would find books on this subject.

EXAMPLE: You are interested in volleyball and would like to browse through the Library's collection of books on this subject.

a) What Library of Congress classification is given to material on this subject? *GV*

b) On what level of the Library are these books located? (1st, 2nd, 3rd) *2nd*

* * * * * * * * * * * * *

1. You need a discussion of the programs that exist for the rehabilitation of convicted burglars.

   a. What Library of Congress classification is given to material on this subject? _____

   b. On what level of the Library are these books located? (1st, 2nd, 3rd) _____

2. For a course on international corporations, you need to find books that discuss the effects on the American economy of foreign ownership of American companies.

   a. What Library of Congress classification is given to material on this subject? _____

   b. On what level of the Library are these books located? (1st, 2nd, 3rd) _____

A 6

3. The use of fusion reactions to produce electrical power is said to be several decades in the future. You need a discussion of the theoretical problems still to be solved before such power plants will be possible.

   a. What Library of Congress classification is given to material on this subject? _____

   b. On what level of the Library are these books located? (1st, 2nd, 3rd) _____

4. You would like to find out the extent to which your landlord is legally liable for damage to your personal property as a result of work done on the roof of your building.

   a. What Library of Congress classification is given to material on this subject? _____

   b. On what level of the Library are these books located? (1st, 2nd, 3rd) _____

5. Eastern religions seem to have a powerful appeal to many Americans who have grown up in the Judeo-Christian tradition. You would like to find out more about some of these religions in order to know why they attract so many Americans.

   a. What Library of Congress classification is given to material on this subject? _____

   b. On what level of the Library are these books located? (1st, 2nd, 3rd) _____

Exercise II: Identifying Collections in the Library

These problems are designed to reinforce what you learned from your tour of the Library about the various collections that are kept separate from the main book collection.

Directions: 1) Read each information problem thoughtfully, and identify the collection to which you would go to find the answer.

2) Indicate on what level of the Library that collection is located.

EXAMPLE: The U.S. Fish and Wildlife Service periodically published a list of species of wildlife endangered or threatened by extinction. One of your teachers has asked you to check if the eastern Cougar is on the list.

a) To what collection in the Library would you go? *Government Documents*

b) On what level of the Library is the collection located? (1st, 2nd, 3rd) *2nd*

* * * * * * * * * * * * * *

1. You have been asked to find two journal articles that discuss the electoral process in this and other countries. Rather than looking through the five journals you have been told about, you would like to find an indexing tool that will identify specific articles on your topic.

   a. To what collection in the Library would you go? _____

   b. On what level of the Library is the collection located? (1st, 2nd, 3rd) _____

2. You have a Freshman Seminar assignment that requires you to locate a recent U.S. Congressional hearing on a topic of interest to you.

   a. To what collection in the Library would you go? _____

   b. On what level of the Library is the collection located? (1st, 2nd, 3rd) _____

3. You need to look at some examples of Master's theses for a research methods class. Your instructor has told you that the Library keeps a permanent collection of all the theses written at PSUC in the College archives.

   a. To what collection in the Library would you go? _____

   b. On what level of the Library is the collection located? (1st, 2nd, 3rd) _____

4. You would like to look at the job listings in the major computer science journals to get an idea of the educational preparation required for the kinds of positions you will be seeking.

   a. To what collection in the Library would you go? _____

   b. On what level of the Library is the collection located? (1st, 2nd, 3rd) _____

5. A reference librarian shows you an index to research reports on the environment and tells you that many of the items you will identify through use of this indexing tool will be on microfiche.

   a. To what collection in the Library would you go? _____

   b. On what level of the Library is the collection located? (1st, 2nd, 3rd) _____

Exercise III: Why Some Collections are Separate

As you learned in doing Exercise II, libraries often have distinct collections of materials that are kept separate from the main book collection. The decision to create such collections is usually based on one or more of the following factors: the type of material; the audience served by the collection; the specialized subject orientation of the material.

Directions: For each of the collections listed below, discuss why you think the collection is separated from the main collection of books.

1. Reference Collection: _____

2. Special Collections: _____

INTRODUCTION TO CARD CATALOGS: IN-CLASS WORKSHEET

I. Information Needs and Sources

To begin to solve an information problem, you must learn to match your need for a type of information with a type of source likely to provide that information.

Type of Information Needed	Type of Source to Use
FACT →	FACT REFERENCE SOURCE
BACKGROUND →	BACKGROUND REFERENCE SOURCE
EXTENSIVE →	CONTENTS OF BOOKS AND JOURNAL ARTICLES

Information problem	Type of information needed	Type of source to use
1. Suppose you need an explanation of the methods typically used by political scientists to analyze voting patterns		
2. Suppose you need to find out how many people in your home district voted for your current Congressman, and their party affiliations		
3. Suppose you need to investigate whether recent voting patterns in the U.S. reflect decreasing levels of confidence in government		

II. Distinguishing between need to use Author/Title Card Catalog and need to use Subject Card Catalog

Information problem	Which Card Catalog would you use?
1. Suppose you wanted to find out if the library had any books about John Lennon	
2. Suppose you wanted to see if the library had any books by Henry Kissinger	
3. Suppose you wanted to know if the library had books about vegetarian diets	
4. Suppose your teacher has recommended that you read a book by Michael J. A. Howe entitled Television and Children.	

In what ways could you look this book up in the card catalog?

_____

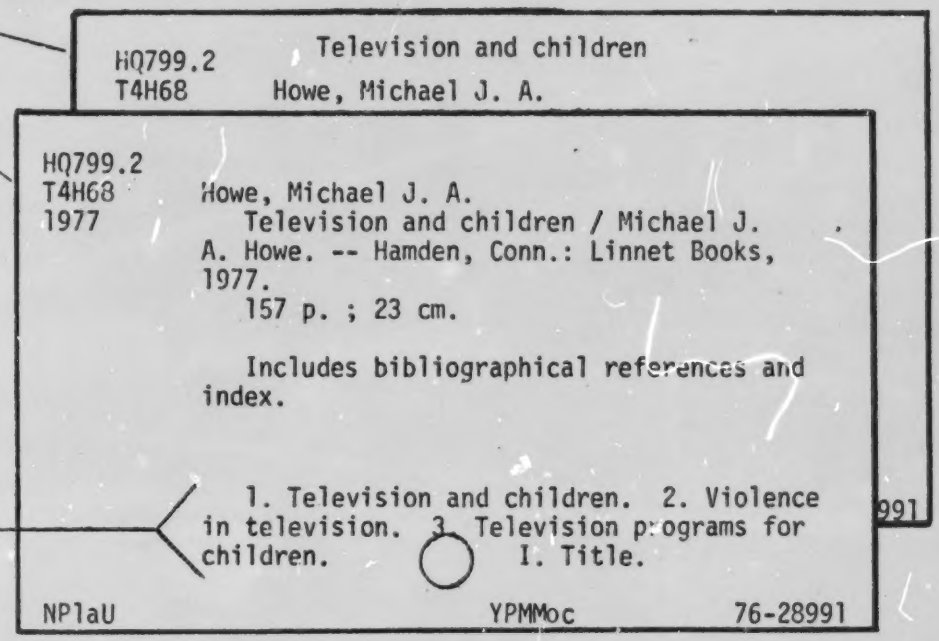
_____

A 9

This is the set of catalog cards for Howe's book Television and Children:

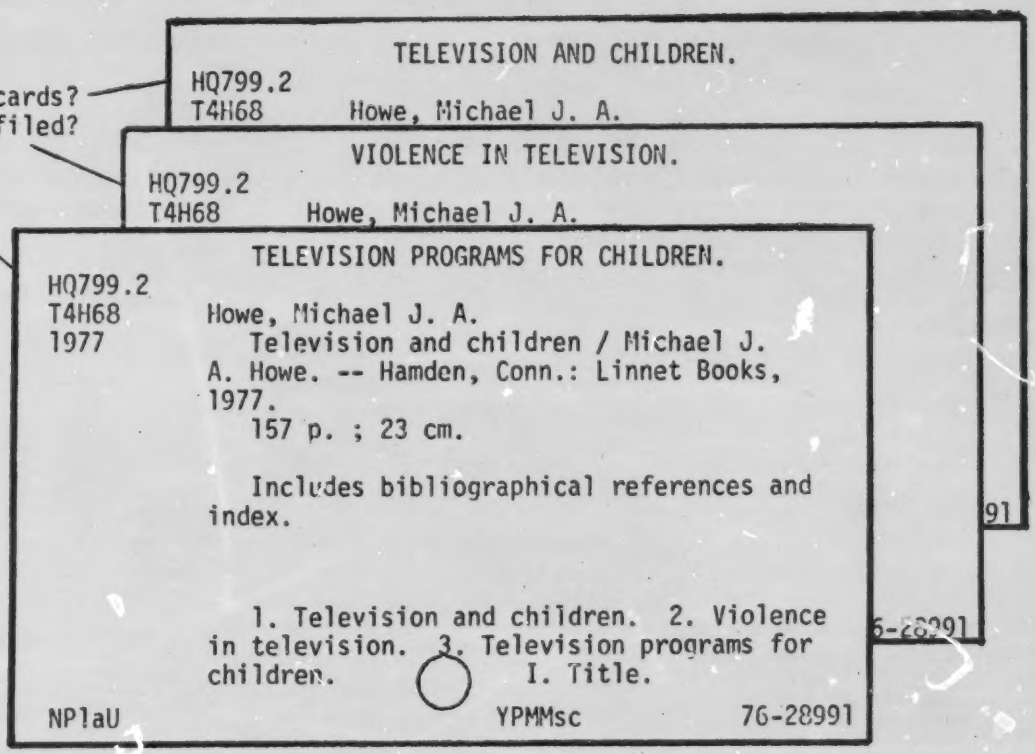
What are these cards? Where are they filed?

What do these notations mean? How are they useful to you?



What are these cards? Where are they filed?

What is the complete call number for this book?



Could you look up "television and children" in both card catalogs? Which card catalog should you use to find the most books on that subject? Why?

Suppose you'd been referred to this specific book and had found the author card for it. How could you easily identify a subject heading to use in the Subject Card Catalog to find more books on the subject?

A10

III. Filing in the Author/Title Card Catalog: Patterns, Rules

Two basic filing principles:

Articles (e.g., a, an, the, in English) at the beginning of titles are ignored

Entries are filed in word-by-word order: the space between words is considered to be a filing element that precedes all letters

Additional rules:

1. The surname prefixes Mac, Mc, and M' are interfiled as if they were all spelled Mac
2. Numbers and abbreviated words are filed as they would be written and spoken in the language of the entry
3. Abbreviations consisting of initials are filed ahead of all other entries beginning with the same first letter, as if each letter in the abbreviation were a separate word
4. Acronyms (abbreviations made up of initials that are written and spoken as words, e.g., FORTRAN) are filed as if they were words
5. Authors' surnames that are identical to the first word of a title or the name of an organization are filed ahead of interfiled title and organization entries

Look over the packet of cards and verify that you understand how the filing rules govern their order.

Why do MHD generation of electric power
and The MLA style sheet
file ahead of Ma, Tsu Sheng

Why does Ma, Tsu Sheng
file ahead of Ma Rainey and the classic blues singers

Why does Mainstream psychology
file ahead of Mainstreaming

Why does McAmis, Robert Day
file ahead of MacArthur, Douglas

IV. How Specific Call Numbers are Ordered on the Shelves

After the explanation in class, put the following call numbers in order, as they would be found on the shelves:

a)	b)	c)	d)	e)
BF269 C76	B2697 F7	BD32 C76	BF269 C692	BD311 C76

1)_____ 2)_____ 3)_____ 4)_____ 5)_____

A11

V. Citation Writing for Books

Five basic bibliographic elements are required to uniquely and unambiguously identify a book:

Bibliographic element	Notes
Author(s) or editor(s) name(s)	Names have to be in full, i.e., if first names are given, have to include them.
Title of book	Have to include subtitle as well, if there is one; use a colon to separate title proper & subtitle. Capitalize all significant words in the title & subtitle; capitalize first word of subtitle.
Place of publication	If more than one place of publication is given, use the first one listed, or the one in this country. Include the (abbreviated) name of the state except for very prominent cities (e.g., Hamden, Conn.; but, Chicago).
This information is either on the title page or on the copyright page (the backside of the title page)	
Publisher	You can use abbreviations such as Inc., Pub. Co.
Year of publication	If year is given on title page, use that. If not, use copyright date (or, if there is more than one, the latest copyright date).

You write bibliographic citations following a style--a style is a set of rules governing how the bibliographic elements are arranged and punctuated. The style you learn in this course is that specified by Turabian's Manual. Become sufficiently familiar with Turabian so that you can look up any rule you may need.

Here is a correct Turabian style bibliography citation for Howe's book Television and Children:

Howe, Michael J. A. Television and Children. Hamden, Conn.: Linnet Books, 1977.

Refer to Chapter 8 in Turabian (pp. 132-7) for examples of citations for books.

1. Suppose Howe had written this book with John K. Smith. How would that change the citation? (see Turabian 8:4)
2. Suppose Howe had written this book with John K. Smith and Morton Brown. How would that change the citation? (see Turabian 8:5)
3. Suppose Howe were an editor, rather than an author. How would that change the citation? (see Turabian 8:11)
4. Suppose this were the third edition of this work. How would that change the citation? (see Turabian 8:18)
5. Suppose that Howe's book were no. 4 in a series of books titled "Great Problems of Our Times." How would that change the citation? (see Turabian 8:16)
6. Suppose that Howe's book had been originally published in 1959 and was reprinted in 1977. How would that change the citation? (see Turabian 8:19)

Name_____

Section_____ Instructor_____

INTRODUCTION TO CARD CATALOGS

Introduction

In the Orientation assignment, you learned about various systems of organization in libraries: that the book collection, for example, is arranged according to a classification system, and that there may be several distinct collections of materials, each with its own arrangement and purpose. Your familiarity with these basic patterns of organization is an important first step in learning to use a library.

When you have an information problem, you need to analyze that problem to determine what type of source is most suitable to use. Exercise I of this assignment gives you practice in doing this. To introduce you to the card catalogs and their use as major access tools to the Library's book collection, Exercises II and III expose you to basic principles that govern their functions, and to some standard filing patterns and rules. Exercise IV provides practice in understanding how call numbers order books on the shelves. In Exercise V, you use the card catalog to identify a specific book, locate it, and write a bibliography citation for it.

Exercise I: Analyzing Information Problems to Determine Appropriate Sources to Use

Solving information problems requires that you first determine the type of information you need. You can then relate that need to an appropriate type of source likely to provide suitable material. Information needs may be categorized as those that require brief factual information; those that require background information; and those that require more extensive analysis and discussion. The type of information required determines the type of source for which you should look: a reference source providing brief factual information; a reference source providing background explanation; or books and periodical articles providing analysis, evidence, or diverse opinion. This exercise gives you practice in analyzing information problems, and in selecting appropriate types of sources.

Directions: The OUTLINE below represents a way of categorizing information needs and matching up those needs with the appropriate types of sources to consult.

1) Read each information problem thoughtfully, and use the OUTLINE to identify the type of information needed to answer the problem.

2) Using the OUTLINE, relate the type of information needed to the corresponding type of source appropriate to consult to locate that information.

OUTLINE

TYPE OF INFORMATION NEEDED	*APPROPRIATE TYPE OF SOURCE TO USE*
FACT: simple, concise information about people, places, things, or events. (Examples: dates, definitions, statistics) Typical format: brief, condensed information.	→ FACT REFERENCE SOURCES (Examples: atlases; yearbooks; almanacs; biographical dictionaries; directories; statistical sources; books of tables or graphs; word dictionaries)
BACKGROUND: commonly-accepted, general information, providing basic orientation to knowledge about a subject. Typical format: essays that explain and summarize.	→ BACKGROUND REFERENCE SOURCES (Examples: general encyclopedias; subject encyclopedias)
EXTENSIVE: detailed information about a subject that provides evidence, interpretation, or judgment from which you can draw your own conclusions. Typical format: in-depth discussions, analyses, or research studies.	→ CONTENTS OF BOOKS AND PERIODICAL ARTICLES (Examples: books and periodical articles devoted wholly or in part to your topic)

A13

EXAMPLE: INFORMATION PROBLEM: Who is currently the head of the Communist Party in Bulgaria?

a. Type of information needed: fact

b. Type of source needed (check one):
x Fact reference source
___ Background reference source
___ Contents of books and periodical articles

* * * * * * * * * * * *

1. INFORMATION PROBLEM: In the United States in the 1960s, it was heatedly argued in some circles that automation in industry would cause massive unemployment problems and possibly destroy the American labor movement. Could a case be made that this is indeed what has happened?

   a. Type of information needed:_____

   b. Type of source needed (check one):
   ___Fact reference source
   ___Background reference source
   ___Contents of books and periodical articles

2. INFORMATION PROBLEM: Juanita M. Kreps was the U.S. Secretary of Commerce from 1977 to 1979. What is her current job?

   a. Type of information needed:_____

   b. Type of source needed (check one):
   ___Fact reference source
   ___Background reference source
   ___Contents of books and periodical articles

3. INFORMATION PROBLEM: Under what atmospheric conditions is it likely that thunderstorms will occur, and are there any differences in these conditions and those likely to produce tornadoes?

   a. Type of information needed:_____

   b. Type of source needed (check one):
   ___Fact reference source
   ___Background reference source
   ___Contents of books and periodical articles

Exercise II: The Card Catalog

You use the Library's card catalog when your need for information requires that you find books in the Library--for example, when you want extensive information in book form about a subject. The card catalog is a fairly intricate tool. This exercise provides some basic introduction to using it to locate books. In future exercises, you will learn more details about it, and you will also learn how to use other library tools to access materials not covered by the card catalog.

The card catalog contains cards that represent the books the Library has. In this Library, the card catalog is divided into two parts: the Author/Title Card Catalog, and the Subject Card Catalog. The Author/Title Card Catalog has cards filed by authors' and editors' last names, and cards filed by the titles of the books; the Subject Card Catalog has cards filed by the subjects with which the books are concerned.

Each card catalog functions in a distinct way to give you access to books in the Library. It is important that you learn to distinguish between the functions of the two card catalogs so that you select and use the catalog that is suitable to answering your particular information need.

Directions: Prior to doing this exercise, read pages 2 and 3 of Feinberg Library Guide #1.

1) Thoughtfully read through each information problem. Determine which card catalog--the Author/Title Card Catalog, or the Subject Card Catalog--you should use to answer the problem.

2) Consult the appropriate catalog, and supply the information requested.

EXAMPLE: INFORMATION PROBLEM: Who wrote the book Cry of the People?

A. Which catalog should you consult?
1. x Author/Title Card Catalog
2. ___Subject Card Catalog

B. Now, consult the card catalog and determine the author's name:

Penny Lernoux

* * * * * * * * * * * * *

1. INFORMATION PROBLEM: Does the Library have any books specifically about George Pratt Shultz, the recently appointed U.S. Secretary of State?

A. Which catalog should you consult?
1. ___Author/Title Card Catalog
2. ___Subject Card Catalog

B. Now, consult the catalog and check the correct response:
1. ___Library has books specifically about him
2. ___Library has no books specifically about him

2. INFORMATION PROBLEM: Suppose you were interested in the subject of lobbying.

A. Could you look up the word "lobbying" in both the Author/Title Card Catalog and the Subject Card Catalog and locate books dealing specifically with that subject?

1. ___yes
2. ___no

B. Which card catalog should you use to locate the most books on the subject? EXPLAIN YOUR ANSWER.

_____

_____

_____

_____

_____

3. INFORMATION PROBLEM: Who wrote the book Instead of the Trees?

A. Which catalog should you consult?
1. ___Author/Title Card Catalog
2. ___Subject Card Catalog

B. Now, consult the card catalog and determine the author's name:

_____

A15

4. INFORMATION PROBLEM: For your speech class, you decide to give a talk about anger. Does the Library have books specifically concerning the subject of anger?

   A. Which catalog should you consult?
      1. ___ Author/Title Card Catalog
      2. ___ Subject Card Catalog

   B. Now, consult the catalog and check the best response:

      1. ___ Library has no books specifically on this subject
      2. ___ Library has fewer than 5 books specifically on this subject
      3. ___ Library has more than 5 books specifically on this subject

EXERCISE III: Filing Rules Used in the Author/Title Card Catalog

The purpose of this Exercise is to familiarize you with five special filing rules used in this library's Author/Title Card Catalog.

Directions: Prior to doing this Exercise, read "Additional Rules Used in Feinberg Library's Author/Title Card Catalog," page 5 of Feinberg Library Guide #1.

1) Locate the catalog card that represents the book specified in the problem.

2) Write down a) the complete call number of the book; b) the number of the rule that applies to the filing of this specific card; and c) the level of Feinberg Library on which the book would be found.

EXAMPLE: Locate the catalog card for the book entitled Dr. Woodward's Shield

a. Complete call number: CT788.W854L48
b. Filing rule that applies: 2
c. Location in Feinberg Library (level): 1st

* * * * * * * * * * * * * * * * * * *

1. Locate the catalog card for a book written by Dorothy McCall.
   a. Complete call number of the book: _____
   b. Filing rule that applies: _____
   c. Location in Feinberg Library (level): _____

2. Locate the catalog card for the book entitled 44 Irish Short Stories.
   a. Complete call number of the book: _____
   b. Filing rule that applies: _____
   c. Location in Feinberg Library (level): _____

3. Locate the catalog card for the book entitled FORTRAN IV with WATFOR and WATFIV.
   a. Complete call number of the book: _____
   b. Filing rule that applies: _____
   c. Location in Feinberg Library (level): _____

A16

4. Locate the catalog card for the book entitled ESP and Parapsychology.
   a. Complete call number of the book: _____
   b. Filing rule that applies: _____
   c. Location in Feinberg Library (level): _____

5. Locate the catalog card for the book entitled Snow on Snow.
   a. Complete call number of the book: _____
   b. Filing rule that applies: _____
   c. Location in Feinberg Library (level): _____

Exercise IV: Arrangement of Call Numbers

By now, you are generally familiar with how the classification system is used to arrange books on the shelves by the general subjects with which they deal. Specific call numbers within Library of Congress classifications are arranged according to particular rules, which are explained in Feinberg Library Guide #1.

Directions: 1) Read "Interpreting Call Numbers" on the first page of Feinberg Library Guide #1.

2) Place the following call numbers in the proper order, as they would be found on the shelves.

a)	b)	c)	d)	e)
BF32 K457	B17 C23	BF311 K46	BL210 C223	BF311 K456

1)_____ 2)_____ 3)_____ 4)_____ 5)_____

Briefly explain what you have to be aware of in order to arrange these two call numbers in the correct order:

BF311 K46 and BF311 K456

_____

_____

_____

_____

Exercise V: Principles of Bibliographic Citation Writing for Books

It is frequently the case that you need a book written by a specific author, and then want to identify additional books on the same subject. Part 1 of this exercise gives you practice in doing this. In Part 2, you locate the specific book in the Library and write a correct bibliography citation for it, using the style specified by Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations.

1. Using the Author/Title Card Catalog, locate the catalog card for a book written by Anton Ehrenzweig.

   a. Complete call number of the book: _____

   b. What is one subject heading you could use in the Subject Card Catalog to identify additional books on this subject?

   _____

2. Go to the appropriate area of the Library and locate the book. (If the book you looked up is not on the shelf, take the book immediately following it in call number order, and indicate its complete call number here: _____.)

   Using the style specified in Turabian's Manual, write a complete bibliography citation for this book:

   _____

   _____

   _____

   _____

In Exercise V, Part 1, each student is given a different author's name

WRITING BIBLIOGRAPHIC CITATIONS: SOME BASICS

The purpose of a citation format is to assure the inclusion of all necessary information about a bibliographic item, so that it is uniquely and unambiguously identified. A uniform format, or style, guarantees that the sources used, or referred to, in a paper are displayed in an orderly, consistent fashion, and thereby provides all the details readers need to locate the sources themselves.

Turabian's Manual, like all style manuals, specifies (and provides examples of) how citations for various types of publications should be organized and punctuated. To write acceptable citations in this or any other course, these details must be slavishly adhered to. General patterns and examples given here are only the basics; consult Turabian directly for full explanations and instructions.

BIBLIOGRAPHY CITATIONS

Note: All but the first line is indented to expose the last name of the (first) author or editor, since it is by these last names that the bibliography is ordered.

Citation Format	*Examples Implementing Format*
for a book (see Turabian 8:3 B)	
Author [last name first]. Title of Book. City where published: Publisher, year.	Richardson, Harry W. Economic Aspects of the Energy Crisis. Lexington, Mass.: Lexington Books, 1975.
for a journal article (see Turabian 8:35 B)	
Author [last name first]. "Title of Article." Title of Journal vol. no. (full date):pages.	Griffin, Paul A. "The Time-Series Behavior of Quarterly Earnings: Preliminary Evidence." Journal of Accounting Research 15 (Spring 1977):71-83.
for a magazine article (see Turabian 8:36 B)	
Author [last name first]. "Title of Article." Title of Magazine, full date, pp. - .	Restak, Richard. "The Origins of Violence." Saturday Review, 12 May 1979, pp. 16-19.

FOOTNOTE CITATIONS

Note: The first line is indented to make a footnote appear to be another paragraph at the bottom of the page; indent in this fashion even when footnotes are put on a separate page.

Citation Format	*Examples Implementing Format*
for a book (see Turabian 8:3 N)	
[1]Author [first name first], Title of Book (City where published: Publisher, year), p. .	[1]Harry W. Richardson, Economic Aspects of the Energy Crisis (Lexington, Mass.: Lexington Books, 1975), p. 19.
for a journal article (see Turabian 8:35 N)	
[2]Author [first name first], "Title of Article," Title of Journal vol. no. (full date):page number.	[2]Paul A. Griffin, "The Time-Series Behavior of Quarterly Earnings: Preliminary Evidence," Journal of Accounting Research 15 (Spring 1977):72.
for a magazine article (see Turabian 8:36 N)	
[3]Author [first name first], "Title of Article," Title of Magazine, full date, p. .	[3]Richard Restak, "The Origins of Violence," Saturday Review, 12 May 1979, p. 17.

A19

SUBJECT SEARCHING IN THE CARD CATALOG: IN-CLASS WORKSHEET

I. Using Library of Congress Subject Headings (LCSH)--the authority list that governs the subject headings that may be used in the Subject Card Catalog

WHAT LCSH DOES	HOW THIS IS DONE
Indicates which terms have been authorized for use	Terms authorized for use (authorized subject headings) are given alphabetically in boldface type
Defines subject headings when they are closely related in meaning to others	Scope notes--brief descriptions specifying the range of subject matter when required to distinguish between closely related subject headings
Under authorized subject headings, indicates synonymous terms NOT authorized for use	x references
Provides linkages (cross references) between terms *Cards for these cross references may also appear in the Subject Card Catalog* *These cross references appear ONLY in Library of Congress Subject Headings*	Three types of cross references: *See* references--refer you from terms not authorized for use to authorized subject headings *sa* [see also] references--refer you to authorized subject headings that are related, but (typically) of narrower scope xx [see also from] references--refer you to authorized subject headings that are related, but (typically) of broader scope

Excerpts from Library of Congress Subject Headings:

Talented students — *authorized subject heading*
Here are entered works on students with above-average abilities at the college and university levels. Works on students of like abilities in Grade 1-12 are entered under Gifted children — *scope note*
sa Gifted children
Universities and colleges--Honors courses
xx Gifted children
Students

Tape recorders
See Magnetic recorders and recording — *See reference (for books on tape recorders, look under Magnetic recorders and recording)*

Tax-dodging
See Tax evasion

Tax evasion (*Indirect*) (HJ2348.5; Criminal law, K; Income tax, HJ4653.E75)
sa Tax collection
Tax penalties — *See also references (direct you to related, usually narrower headings)*
x Evasion, Fiscal
Tax-dodging — *x references (indicate terms NOT used as subject headings)*
xx Criminal law
Evasion (Law)
Taxation
White collar crimes — *xx references (direct you to related, usually broader headings)*

Using subject heading structure when searching for materials on a topic:

1. Why is it important that you identify subject headings that specifically represent a topic in which you are interested?

_____

2. When searching for materials on a topic, how can the *sa* references help you?

_____

3. When searching for materials on a topic, how can the *xx* references help you?

_____

REMEMBER: Whereas *See* references and *See also* references may also be in the Subject Card Catalog, the ONLY place you find *xx* references is in Library of Congress Subject Headings.

4. What is one, quick method for identifying authorized subject headings when you already know a specific book on your topic?

_____

How does this method compare with using Library of Congress Subject Headings to identify authorized subject headings for a particular topic?

_____

_____

II. Using Library of Congress Subject Headings to identify specific subject headings:

Chicanos
See Mexican Americans
Child abuse
sa Battered child syndrome
Interviewing in child abuse
x Child neglect
Cruelty to children
xx Child welfare
Children--Management
Conjugal violence
Parent and child
Youth--Crimes against
Child care centers
See Day care centers
Child neglect
See Child abuse

What subject heading is used for books on child neglect?

_____

What subject heading is used for books about Chicanos?

_____

Suppose you found too many books using the subject heading CHILD ABUSE. How might you narrow the focus of your topic?

_____

Suppose you found too few books using the subject heading CHILD ABUSE. How might you broaden the focus of your topic?

_____

III. Proper noun subject headings--For the most part, proper noun subject headings are NOT given in Library of Congress Subject Headings (there are simply too many). However, they can be authorized subject headings used in the Subject Card Catalog. AND they may be the best, most specific subject headings for your topic.

What are likely and appropriate subject headings to use in the Subject Card Catalog to identify books on the following topics:

1. Lee Harvey Oswald: _____
2. The Hudson's Bay Company: _____
3. The role of Project Gemini in U.S. space exploration: _____

If the Library has books about particular creative works by individuals, the subject heading will be:

[name of the individual, date(s)].[title of the creative work]

1. Suppose you want books about Pablo Picasso's painting "Guernica." What subject heading would you use in the Subject Card Catalog?

_____

2. Suppose you want books about Richard Wagner's opera "Tristan und Isolde." What subject heading would you use in the Subject Card Catalog?

_____

Feinberg Library/PSUC LIB101

A22

Name_____

Section_____ Instructor_____

SUBJECT SEARCHING IN THE CARD CATALOG

Introduction

In doing your last assignment, you became familiar with the distinctive purpose of each of the card catalogs: you use the Author/Title Card Catalog to determine whether the Library has a specific book when its author and/or title is already known to you; you use the Subject Card Catalog to determine what books the Library has that examine a particular topic of interest.

The card catalogs are indexing systems. Like most indexing systems, they are governed by structures and rules that establish systematic and consistent patterns, and knowledge of these is essential to their effective use. Your last assignment exposed you to some of the rules that govern the ordering of cards in the Author/Title Card Catalog. This week's assignment introduces you to the patterns that structure the subject headings used in the Subject Card Catalog.

Authorized Subject Headings

The Subject Card Catalog is an indexing system providing access to books by the subjects with which they are concerned. A central problem in any subject indexing system is that a particular idea, concept, or thing may be described in several ways. Thus, it is necessary to decide what specific word or phrase is best to use. The terms selected must be precise, and used consistently. It would not be helpful, for example, to use the subject heading BLACK OAK for some books about black oak trees, and to use the subject heading QUERCUS VELUTINA LAM (the scientific name for black oak) for others. Nor would it be economical to use all conceivable subject terms to describe every book about black oaks; a single term must be designated to represent the topic. A form for the subject heading must also be selected. It might be, for example, that OAK, BLACK rather than BLACK OAK would be the more useful designation. In subject indexing systems, certain terms, and the form those terms take, become authorized for use, while others do not.

To maintain consistency, and to assist users, many indexing systems publish lists of the subject headings authorized for use in that system. Library of Congress Subject Headings is such a list; it is the authority that governs the choice of subject headings that may be used in the Library's Subject Card Catalog. As is the case with other authority lists of this type, it not only lists those headings authorized for use, but also provides a system of cross references between terms. The cross references are of two types: 1) there are cross references that link likely, but unused, synonyms to authorized subject headings (*See* references); and 2) there are cross references that link together subject headings that are related to each other (*sa* [See also], and xx [See also from] references).

Relationships Between Library of Congress Subject Headings and the Subject Card Catalog

To help the user search the Subject Card Catalog, two types of cross references specified in Library of Congress Subject Headings are, for many subject headings, entered as well in the Subject Card Catalog: 1) references from unused synonyms to authorized terms (*See* references); and 2) references from authorized terms to terms that are related or of narrower scope (*See also* references). For many subject searches, then, the Subject Card Catalog leads the user to authorized terminology, and assists in the identification of subject headings pertinent to more narrowly focused searches. By contrast, authorized subject headings that are of broader scope (xx references) are identifiable only by consulting Library of Congress Subject Headings where full subject heading structure is displayed. Together, cross references, and the display of subject heading structure in Library of Congress Subject Headings, function to assist the user in identifying authorized subject headings that are specific and appropriate for solving particular information problems.

Subdivisions

Subject headings themselves may be made more specific by the addition of various types of subdivisions to the main subject heading. These subdivisions may specify: 1) the form or organization of the information presented; 2) the particular subject aspect of the topic dealt with; 3) the geographic region concerned; or 4) the time period covered. When added to a main subject heading, the subject heading along with its subdivision comprises a new, more specific subject heading.

In doing these exercises, you will demonstrate that you understand the use of Library of Congress Subject Headings, particularly the function of cross references (Exercise I). In doing Exercises II and III, you will use several techniques (singly, or in combination) to identify specific subject headings: 1) use the *See* and *See also* cross references that have been entered in the Subject Card Catalog; 2) use the range of subject headings displayed in Library of Congress Subject Headings; and 3) use the subject headings given at the bottom of a catalog card. Exercise IV gives you practice in recognizing how subdivisions are used to form more specific subject headings. Exercise V asks you to reflect on how subject heading structure is useful to the process of topic selection.

Exercise I: Understanding Subject Heading Structure

The objective of this exercise is to help you understand the function of cross references, and to have you reflect on why it is important to use subject heading structure when searching the Subject Card Catalog for books on a topic.

Directions: 1) Select one of the following subject headings (check the one you choose):

___ COST ACCOUNTING	___ MINICOMPUTERS
___ ENVIRONMENTAL PSYCHOLOGY	___ SPACE STATIONS
___ HOSPITAL PATIENTS	___ VALUE

2) Look this subject heading up in Library of Congress Subject Headings (hard bound copies, and an updated copy on microfiche, are on the counter near the Subject Card Catalog; a copy is also kept on the counter near the Reference Desk), and answer the following questions:

1. What is one term that is not authorized for use in the Subject Card Catalog to represent the subject you chose?

   _____

2. What is an authorized subject heading that is related to the heading you chose, but which is used to represent books on subjects of narrower scope?

   _____

3. Briefly explain why, when researching a subject, it is important to be able to identify subject headings that are of narrower scope:

   _____

   _____

   _____

   _____

   _____

   _____

A2-

4. What is an authorized subject heading that is related to the heading you chose, but which is used to represent books on subjects of broader scope?

_____

5. Briefly explain why it is important to be able to identify subject headings that represent broader approaches to a subject in which you are interested:

_____

_____

_____

_____

_____

Exercise II: Identifying Specific Subject Headings

This exercise provides you with practice in identifying authorized subject headings that are specific and most appropriate to answering a particular information need.

Directions: Prior to doing this exercise, carefully read pages 6 and 7 of Feinberg Library Guide No. 1.

1) Read through each information problem thoughtfully.

2) Use Library of Congress Subject Headings, and the cross references that have been entered in the Subject Card Catalog, to identify the most appropriate subject heading for locating books that answer the information problem.

NOTE: The most appropriate subject heading will be the one that both appears in the Library's Subject Card Catalog (meaning that this Library has books on the topic), and that most specifically addresses the information problem.

1. What subject heading is used to locate books about child actors?

_____

2. What subject heading is used to find books about the aviation industry?

_____

3. What subject heading is used to identify books about the use of propaganda in motion pictures?

_____

Exercise III: Solving Some Subject Card Catalog Search Problems

Most proper nouns are excluded from Library of Congress Subject Headings; inclusion of all possible proper nouns (e.g., the names of all the people, bridges, deserts, rivers, monuments, etc., about which books have been written) would make Library of Congress Subject Headings extraordinarily large. Subject headings that are proper nouns appear in the Subject Card Catalog when they are required to afford access to books devoted to these subjects; in most cases, these proper noun subject headings do not also appear in Library of Congress Subject Headings.

A25

This exercise gives you practice in identifying subject headings that are proper nouns, or begin with proper nouns. The exercise also exposes you to three special situations that often occur when you use the Subject Card Catalog to identify books on a topic:

Using the subject headings that appear on the bottom of a catalog card to identify additional useful subject headings;

Using Library of Congress Subject Headings and the system of cross references in the Subject Card Catalog to identify subject headings of narrower scope when the material you are finding approaches your topic too broadly;

Using Library of Congress Subject Headings to identify subject headings of broader scope when you are unable to find sufficient materials on a particular topic.

Directions: 1) Read through each information problem thoughtfully.

2) Apply your knowledge about the use of Library of Congress Subject Headings, the use of the Subject Card Catalog, and the use of information on a catalog card, and respond as requested.

1. What subject heading is used to represent books about A Farewell to Arms, a novel by Ernest Hemingway?

_____

2. According to the Subject Card Catalog, this Library has only one book about Sir Francis Edward Younghusband, a soldier, diplomat, explorer, geographer, and mystic who lived in India. Find the catalog card for this book.

   a. Who is the author of this book? _____

   b. What is the title of this book? _____

   _____

   c. Identify an additional subject heading that will lead to other books likely to contain information on Sir Francis Edward Younghusband:

   _____

3. Suppose you have identified MAKE-UP, THEATRICAL as a subject heading that may be useful for finding material on your topic of research. Upon looking this subject heading up in the Subject Card Catalog, however, you find that there are a great many books, but that they cover the topic very broadly. Identify a related subject heading that will lead to books on a specific aspect of the topic, and that is also found in the Subject Card Catalog:

   _____

4. Suppose you have identified MATURATION (PSYCHOLOGY) as a subject heading that may be useful for finding materials on your topic of research. Upon looking this subject heading up in the Subject Card Catalog, however, you find that there are too few books on the topic in this Library. Identify a related subject heading that will lead you to books that take a broader approach to the topic, and that is also found in the Subject Card Catalog:

   _____

Exercise IV: Subdivisions

Subdivisions are frequently used with subject headings to more specifically identify the content or format of materials. A new, more specific subject heading is formed by the addition of a subdivision to a main subject heading.

This exercise provides practice in discriminating between the various types of subdivisions: form, topical, geographic, and period. You will demonstrate that you understand how, when used with main subject headings, subdivisions function to more specifically represent a topic.

IMPORTANT: Prior to doing this exercise, carefully review "Subdivisions: Explanations and Examples," the handout you received with this assignment. Refer also to page 7 of Feinberg Library Guide No. 1 for an explanation and illustration of subject heading filing order used in this Library's Subject Card Catalog.

A. Form, Topical, and Geographic Subdivisions

Directions: 1) Select one of the following subject headings (check the one you choose):

___ BUREAUCRACY
___ CHEMICAL INDUSTRIES
___ CHILD PSYCHIATRY
___ PSYCHICAL RESEARCH
___ SUICIDE

2) Look this subject heading up in the Subject Card Catalog. Flip through all the cards that begin with this subject heading. Investigate the subdivisions that are used with that main subject heading, and respond as requested.

EXAMPLE: Identify a subdivision that limits the concept expressed by the main subject heading to some particular subject aspect of the topic. This complete specific subject heading is:

ABORTION -- PSYCHOLOGICAL ASPECTS
main subject heading -- topical subdivision

NOTE: The subject heading ABORTION is used here only for this example; it is not one of the subject headings you may choose to use.

* * * * * * * * * * * * * * *

1. Identify a subdivision that specifies the geographic limits of the concept expressed by the main subject heading you have selected to investigate. This complete specific subject heading is:

_____ -- _____
main subject heading -- geographic subdivision

2. Identify a subdivision that limits the concept expressed by the main subject heading to some particular subject aspect of the topic. This complete specific subject heading is:

_____ -- _____
main subject heading -- topical subdivision

3. Identify a subdivision that identifies the particular form or organization used to present the information on the topic. This complete specific subject heading is:

_____ -- _____
main subject heading -- form subdivision

A27

B. Period Subdivisions

Directions: 1) Select one of the following subject headings (check the one you choose):

___ BIOGRAPHY
___ ECONOMIC HISTORY
___ PHILOSOPHY, ENGLISH
___ RELIGIOUS THOUGHT
___ VOYAGES AND TRAVELS

2) Look this subject heading up in the Subject Card Catalog. Investigate the period subdivisions that are used with that main subject heading, and respond as requested.

Identify a subdivision that limits the concept expressed by the main subject heading to a particular time period. This complete specific subject heading is:

_____ -- _____
main subject heading -- period subdivision

Exercise V: Using Subject Heading Structure and Subdivisions
How can both Library of Congress Subject Headings and the subdivisions used with subject headings in the Subject Card Catalog help you if you are choosing a topic for a research paper?

SUBDIVISIONS: EXPLANATIONS AND EXAMPLES

Subject headings are assigned to represent topics as specifically as possible. A book given the subject heading ABORTION, for example, is one that provides a general treatment of that subject. Subdivisions added to main subject headings indicate that the subject matter has been treated in some more specific manner; a book given the subject heading ABORTION--PSYCHOLOGICAL ASPECTS, for example, is one that deals specifically with the psychological aspects of abortion. The addition of a subdivision to a subject heading creates a new, more specific subject heading.

Type of subdivision	How it functions	Notes	Some representative examples
Form	Specifies that a particular form or organization has been used to present the information	With these subdivisions, you can identify how the information is arranged or displayed	CONDUCTORS (MUSIC)--BIOGRAPHY CONSUMER PROTECTION--DIRECTORIES SOCIOLOGY, URBAN--DICTIONARIES WIND POWER--HANDBOOKS, MANUALS, ETC.
Topical	Specifies that the concept expressed by the main subject heading has been limited to some particular subject aspect of the topic	With these subdivisions, you can narrow your search to some particular topical aspect of your subject	ATOMIC POWER-PLANTS--ENVIRONMENTAL ASPECTS BONES--DISEASES CHILDREN, DEAF--FAMILY RELATIONSHIPS CONSUMERS--ATTITUDES NEAR EAST--ANTIQUITIES SWEDEN--HISTORY
Geographic	Specifies that the concept expressed by the main subject heading has been limited to a particular geographic location	With these subdivisions, you can narrow your search to a treatment of your subject in relation to a specific geographic locality	CATTLE TRADE--TEXAS CHILDREN--UNITED STATES COMMUNISM--LATIN AMERICA DESERT ECOLOGY--ARGENTINE REPUBLIC POLITICAL PARTIES--SOUTHERN STATES SHIPPING--NEW YORK (N.Y.)
Period	Specifies that the concept expressed by the main subject heading has been limited to a particular time period	With these subdivisions, you can narrow your search to a treatment of your subject in relation to a specified time period Period subdivisions may be expressed as words and/or as dates. Filing is chronological, with more inclusive periods filed ahead of more specific divisions within those periods.	ART, MODERN--19th CENTURY ART, MODERN--20th CENTURY CANADA--HISTORY--TO 1763 (NEW FRANCE) CANADA--HISTORY--1763-1791 CANADA--HISTORY--19th CENTURY CANADA--HISTORY--REBELLION, 1837-1838 CANADA--HISTORY--1914-1945 SPANISH DRAMA--EARLY TO 1500 SPANISH DRAMA--CLASSICAL PERIOD, 1500-1700 WORLD POLITICS--TO 1900 WORLD POLITICS--20th CENTURY WORLD POLITICS--1900-1945 WORLD POLITICS--1933-1945

A28

SEARCHING THE SUBJECT CARD CATALOG

Two basic rules apply to all searches in the Subject Card Catalog:

1. *Always* begin with the most specific subject heading representing the topic under investigation. Do not use WHITE COLLAR CRIMES, for example, when the actual topic you are researching is TAX EVASION.
2. *Always* look for the proper noun, if one exists, for the topic. Do not use PETROLEUM INDUSTRY AND TRADE, for example, when your actual topic of interest is STANDARD OIL COMPANY.

Within the context of these two basic rules, there are three situations that can arise when searching the Subject Card Catalog for the extensive information found in books. You may find *too much* information under the subject headings you use; you may find *too little* information under the subject headings you use; or you may find that headings that seem likely and appropriate *do not appear* in the Subject Card Catalog.

A. If it seems that you are finding *too much* information, you are probably using subject headings that are too broad for your topic of research. Ask yourself these questions:

1. Are there *See also* references in the Subject Card Catalog, referring to subject headings of related and narrower scope?
2. Are there *sa* references in Library of Congress Subject Headings, referring to subject headings of related and narrower scope?
3. Have you used subdivisions to help narrow the focus of the topic?
   a. Topical subdivisions, e.g., CORPORATIONS--CORRUPT PRACTICES
   b. Geographical subdivisions, e.g., WHITE COLLAR CRIMES--UNITED STATES
   c. Period subdivisions, e.g., UNITED STATES--POLITICS AND GOVERNMENT--1963-1969
   d. Form subdivisions, e.g., CRIME AND CRIMINALS--BIOGRAPHY
4. Should you read background information so that you better understand the topic, and can then investigate a more specific aspect of it?

B. If it seems that you are finding *too little* information, you are probably using subject headings that are too narrow for your topic of research. Ask yourself these questions:

1. Are there *xx* references in Library of Congress Subject Headings, referring to subject headings of related and broader scope?
2. If you have identified the call number of one relevant book, have you browsed the shelves under that Library of Congress classification for other books on the topic?
3. Have you used the alphabetical arrangement of Library of Congress Subject Headings and the Subject Card Catalog to their fullest advantage?

C. If it seems that likely and appropriate terms for your topic of research *do not appear* in the Subject Card Catalog, ask yourself these questions:

1. Are there *See* references in the Subject Card Catalog or in Library of Congress Subject Headings referring from terms not used to subject headings that are?
2. Have you considered inverted adjectival headings, e.g., COMPETITION, UNFAIR, qualified headings, e.g., CORRUPTION (IN POLITICS), or phrase headings, e.g., AUTOMOBILE INDUSTRY AND TRADE?
3. Are you breaking a filing rule?
4. Have you looked under the topic in the Author/Title Card Catalog, hoping to find a title that begins with that term? If successful, you can then use the tracings at the bottom of the catalog card to identify relevant, authorized subject headings that will appear in the Subject Card Catalog.
5. Have you consulted a thesaurus for synonyms?

Feinberg Library/PSUC LIB101 (A30)

Name _____

Section _____ Instructor _____

ACCESS TO BACKGROUND INFORMATION

Introduction

In another assignment, you have been introduced to the idea that there are various types of sources to use to address various kinds of information needs: background reference sources, fact reference sources, and sources that are more extensive in their treatment of particular topics, e.g., books and periodical articles. You have also been introduced to the use of Library of Congress Subject Headings for identifying the range of subject headings appropriate to searching the Subject Card Catalog to locate materials on a particular topic.

In doing this assignment, you combine your ability to use subject heading structure presented in Library of Congress Subject Headings with your understanding of the use of form subdivisions to: a) locate subject encyclopedias that provide background information; and b) identify specialized bibliographies.

The background reference sources you locate in doing these exercises are typical of those you would want to use in the initial stages of research. Articles in subject encyclopedias provide basic summaries of generally accepted knowledge within a field of study, as well as references to recommended publications. Exercise I introduces you to how this type of background source can be located through the Subject Card Catalog. In Exercise II, you will use the Subject Card Catalog to identify specialized bibliographies of selected materials relevant to a specified research area; these are typical of those useful for supplementing lists of references provided by other background sources.

Exercise I: Subject Encyclopedias

To locate subject encyclopedias through the Subject Card Catalog, you use the subject heading authorized by Library of Congress Subject Headings to represent the field of study, or area of knowledge, with which your specific topic is concerned, and add the form subdivision --DICTIONARIES. The form subdivision --DICTIONARIES is used to identify both encyclopedias and dictionaries. You can distinguish subject encyclopedias from subject dictionaries by their titles, or by personally examining the sources.

Directions: 1) Relate the topic of the information problem to the appropriate field of study, or subject area, that would include consideration of the topic, and identify the authorized Library of Congress subject heading for that subject. Combine that subject heading with the form subdivision --DICTIONARIES.

2) Consult the Subject Card Catalog under the subject heading and subdivision combination; note down title and complete call number.

3) Locate the subject encyclopedia in the Reference collection. Indicate pages in that source where the article appears that considers the information problem; indicate whether the article includes a selective bibliography of additional sources, and, if so, on what page(s).

EXAMPLE: You are beginning research for a paper on the role of protein metabolism in nutrition and would like to locate background information on this subject.

1. *Subject heading to use in the Subject Card Catalog:*
   NUTRITION -- DICTIONARIES
   main subject heading -- form subdivision
2. *Title: McGraw-Hill Encyclopedia of Food, Agriculture, and Nutrition*
3. *Call number: Ref.TX349.M2*
4. *Article is on page(s): 532-534 (indicate volume no., if necessary: ___)*
5. *Article includes a bibliography: x yes; ___ no. If yes, on page(s): 534*

A31

A. Cryonics is the practice of freezing human bodies in the hope that suspended animation will be achieved, and that the body can be resuscitated at some future time. Cryonics raises interesting and difficult bioethical questions, and you're intrigued enough to want to do a research paper on this topic. Locate a subject encyclopedia that includes a discussion of cryonics as it relates to medical ethics.

1. Subject heading to use in the Subject Card Catalog:

_____ -- _____
main subject heading -- form subdivision

2. Title: _____

3. Call number: _____

4. Article is on page(s): _____ (indicate vol. number, if necessary: _____)

5. Article includes a bibliography: ___yes; ___no. If yes, on page(s): _____

B. You have to do a paper for your philosophy class, and your professor has suggested that you do it on miracles. To get started, you would like to read background information on how philosophers have dealt with the question of miracles.

1. Subject heading to use in the Subject Card Catalog:

_____ -- _____
main subject heading -- form subdivision

2. Title: _____

3. Call number: _____

4. Article is on page(s): _____ (indicate vol. number, if necessary: _____)

5. Article includes a bibliography: ___yes; ___no. If yes, on page(s): _____

A32

Exercise II: Specialized Bibliographies

To locate specialized bibliographies through the Subject Card Catalog, you use the subject heading authorized by Library of Congress Subject Headings to represent the subject with which your information problem is concerned, and add the form subdivision --BIBLIOGRAPHY.

Directions: 1) Read through the information problem thoughtfully and determine the central subject with which it is concerned.

2) Identify the authorized Library of Congress subject heading for that subject. Combine that subject heading with the form subdivision --BIBLIOGRAPHY.

3) Note title and call number of the bibliography.

EXAMPLE: Pacifism, the uncompromising opposition to all war, has been an important force in American history. You are beginning research for a paper on pacifism, and would like to locate a bibliography of sources on the subject.

1. Subject heading to use in the Subject Card Catalog:

PACIFISM -- BIBLIOGRAPHY
main subject heading -- form subdivision

2. Title: The Literature of Isolationism

3. Call number: Ref.Z6465.U5D63

A. For your theater class this semester, you have to write a paper on stage equipment. You have identified a few recommended sources on your topic using encyclopedias, but would now like to use a source that would provide additional materials on the subject. Identify a specialized bibliography that lists publications about stage equipment.

1. Subject heading to use in the Subject Card Catalog:

_____ -- _____
main subject heading -- form subdivision

2. Title: _____

3. Call number: _____

B. For your sociology class, you want to do your research report on divorce in the United States, and would like to locate a bibliography that lists publications on that subject.

1. Subject heading to use in the Subject Card Catalog:

_____ -- _____ -- _____
main subject heading -- geographic subdivision -- form subdivision

2. Title: _____

3. Call number: _____

Feinberg Library/PSUC LIB101

(A33)

Name _____

Section _____ Instructor _____

Important: Complete this prior to meeting with me for your consultation, and bring it with you to our meeting.

Your consultation with me is: _____ (date); at: _____ (time)

TOPIC TRACER PART I: BACKGROUND INFORMATION AND FOCUSING THE TOPIC

Introduction

This first part of the Topic Tracer takes you through the initial steps of an organized search for library materials on a topic of interest to you. Later in this course, you will continue your search for materials on this same topic by doing Part II of this Topic Tracer, which you will receive later. By the end of the semester, having done both parts, you will have executed an orderly search for library materials on a specific topic, and, from this, you will develop a selective bibliography of eight to ten well-chosen, relevant, quality materials that address your research interest. This selective bibliography, and the two parts of the Topic Tracer, comprise your final project in this course.

In doing Part I of the Topic Tracer, you will: 1) State the general subject area in which you are interested; 2) Locate and become familiar with background information about the subject in both a general encyclopedia and a specialized background source (and reflect on differences between the two in their treatment of the topic); 3) Focus and restate your topic; and 4) Locate, cite, and bring with you to our consultation one of the publications on your topic recommended in one (or more) of the background sources you use.

Note: Do the Topic Tracer in pencil, as you will probably want to make changes and enhancements as you go along.

1. General Subject of Interest
   Briefly describe the general subject in which you are interested:

   _____

   _____

2. Background Information

   A. General Background Information
   Locate The New Encyclopaedia Britannica (Ref.AE5.E363) on the far wall of the Reference Room. Read "How To Use This Volume," which appears at the beginning of each volume of the Micropaedia. Use the Micropaedia to identify an article (or a significant portion of an article) pertaining to your subject in the Macropaedia.

   Article title: _____

   Volume of Macropaedia in which this article appears: _____; on pages: _____

   Bibliography following article appears on page(s): _____

B. Specialized Background Information

The purpose of a background source is to synthesize knowledge: to organize, summarize, and make readily accessible, what has been authoritatively and reliably established.

Description of Specialized Background Sources

Specialized background sources include single or multi-volume subject encyclopedias; handbooks that provide written (not simply statistical) summaries of established knowledge; or specialized bibliographies that not only list sources but also synthesize and discuss the significant aspects of the state of knowledge represented by the sources.

Specialized background sources share three distinguishing features:

a) They provide fairly extensive explanations and summaries of information (hence handbooks presenting only numerical data, or dictionaries providing brief definitions, are NOT background sources).
b) They are organized to facilitate use (e.g., contents may be organized alphabetically, or a highly detailed index may be provided).
c) They typically include bibliographies of recommended materials (references to one or more publications that appear at the end of the articles, or at the end of the sections, or at the end of the book itself).

Two methods can be used to locate specialized background sources that include information pertinent to your topic:

1) Through the Subject Card Catalog
Relate your topic of interest to a subject field. Determine the authorized Library of Congress subject heading for that subject and add the appropriate form subdivision (e.g., --DICTIONARIES; --HANDBOOKS, MANUALS, ETC.). Use this new complete subject heading in the Subject Card Catalog to identify a specialized background source.

2) Through Intelligent Browsing of the Reference Collection
Relate your topic of interest to a Library of Congress classification letter(s), using the outline of LC classes given on page 1 of Feinberg Library Guide No. 1. Go to that area of the Reference Room where fact and background sources are shelved (i.e., not the Index Area). Locate the books with that LC class letter(s), and browse the books on the shelves to identify a specialized background source useful to research on your topic. When selecting a source, keep in mind the description given on the top of this page.

Use either method to select a specialized background information source (preferably a subject encyclopedia) relevant to research on your topic:

Title:_____

Call number:_____

Information appears on page(s):_____ (if multi-volume set, in vol.:_____)

Bibliography is on page(s):_____

OPTIONAL: In addition, you may wish to locate a specialized bibliography on your topic. To do this, identify a Library of Congress subject heading that specifically represents your topic. Combine that subject heading with the form subdivision --BIBLIOGRAPHY. Use the new complete subject heading in the Subject Card Catalog to identify a specialized bibliography:

Title:_____

Call number:_____

Section including items most relevant to your topic appears on page(s):_____

A35

C. Differences Between General and Specialized Background Sources
After reviewing the background information you have found, briefly discuss the differences you have discovered between the treatment given the topic in the general encyclopedia as compared to that provided in the specialized background source:

3. Restating the Topic
Based on what you have learned from the material presented in the background information sources, restate your topic below. In restating the topic, focus on a specific problem, or a particular issue or question, or an area of research concern that provides a structured, focused framework, such as would be appropriate for a ten-page research paper.

4. Locating and Citing a Publication Listed in One of the Background Sources
Identify a publication recommended in one (or more) of the background information sources that is relevant to research on your topic, and that is also in the Library. Locate that publication. Following the style specified by Turabian's Manual, write a correct bibliography citation for it below. BRING THE PUBLICATION YOU HAVE CITED TO YOUR CONSULTATION WITH ME.

Keep this first part of your Topic Tracer and use it to make additions and changes based on what we discuss in our consultation. You will subsequently turn it in along with Part II of the Topic Tracer and your selective bibliography.

TOPIC TRACER PART I: SAMPLE SEARCH

This is an example of a search that matches the steps outlined in Topic Tracer Part I.

1. General Subject of Interest

   The effects of pesticides on the environment; the concerns scientists have about actual and potential ecological damage caused by the use of pesticides.

2. Background Information

   A. General Background Information: The New Encyclopaedia Britannica
   Article title: "Pest Control"
   Volume of Macropaedia in which this article appears: 14; on pages: 139-149
   Bibliography following article appears on pages: 148-149

   B. Specialized Background Information
   Employing Method 1
   Used the subject heading ECOLOGY--DICTIONARIES to locate a subject encyclopedia
   Title: McGraw-Hill Encyclopedia of Environmental Science
   Call number: Ref.QH540.4.M3 1980
   Information appears on pages 530-533; bibliography is on page 533
   Employing Method 2
   Determined that QH is the LC class for biology and ecology; browsed through the Reference QHs, and found same subject encyclopedia

   C. Differences Between the General and the Specialized Background Sources
   The article in The New Encyclopaedia Britannica treats the subject comprehensively, presenting general information. The article in the McGraw-Hill Encyclopedia of of Environmental Science is shorter, by comparison, focusing more directly on environmental concerns. Language used in the subject encyclopedia article is more technical than that used in the general encyclopedia article. Both sources include selective bibliographies of recommended publications. The sources listed in the bibliography in the McGraw-Hill Encyclopedia of Environmental Science generally have more recent publication dates than those listed with the general encyclopedia article; some publications are listed in both.

3. Restating the Topic
   Having read the background information in both encyclopedias, I decide that I would like to focus my topic on the use of sterilized insects to combat infestations of pests. I restate my topic:

   Chemically manufactured pesticides pose distinct environmental hazards. Although the extent and severity of these consequences are still open to some question, current scientific judgment cautions against extensive use of chemical pesticides. The use of sterilized insects to combat specific and localized infestations of pests as an alternative technology will be investigated.

   Note that what I learned from reading my background sources has: 1) brought me to change the direction of my subject interest (from the effects of pesticides on the environment in general, to the use of an alternative to chemical pesticides); and 2) given me sufficient information so that I now have a structured, focused topical framework for my research.

4. Locating and Citing a Publication Listed in One of the Background Sources
   The selective bibliographies in both my background sources list the following book, which I cite following the style specified by Turabian's Manual for a bibliography citation:

   Kilgore, Wendell W., and Doutt, Richard L., eds. Pest Control: Biological, Physical, and Selected Chemical Methods. New York: Academic Press, 1967.

   This book is in the Library (SB950.K5), and has a whole chapter on radiation-induced sterilization of insects for the purpose of pest control.

Search Strategy

A search strategy is an organized approach to locating a range of materials relevant to research on a specific topic. The function of a search strategy is to provide for an orderly progression of steps so that your search for materials on a topic is well-focused, efficient, and appropriately complete.

The key elements of a general search strategy are presented on the following page, in outline form. Future class sessions will cover the distinguishing features of research in the social sciences, the sciences, and the humanities, and how this general search strategy can best be modified for researching topics in those particular subject areas. For now, it is important that you understand the components that make up a general search strategy, as well as the approach to researching it represents. With this as the basis, you will be able to understand the modifications on the general model that will later be discussed.

The steps outlined on the next page take you through an exhaustive search, i.e., a search for all materials that relate to a specific topic. The steps are presented as being distinct; in actual fact, many times they are not. Research is an iterative process: at some step along the way, you may acquire a new understanding of the issues or questions in which you are interested, and this may necessitate that you retrace your steps with this new understanding or new focus in mind. It is also true that some of the sources listed as belonging to certain specific steps of the search strategy may, in reality, have multiple functions: for example, a selective bibliography may sometimes serve not only to provide you with an overview of selected published materials on your topic, but may also function as a narrative background source, assisting you in narrowing and focusing your topic.

Despite this variability, it is helpful to think of the general search strategy in terms of distinct steps. This clarifies the primary functions and uses of the tools and resources you consult, and illustrates the flow or direction which any exhaustive search should take.

With the assignment you do this week, you are being introduced to the concept of a general search strategy, and to the location and use of background information sources (indicated as Steps 2 and 3). You have already been introduced to how to identify specific subject headings to use in the Subject Card Catalog for locating extensive discussions and analyses published in books on particular topics (Step 5). In future class sessions and assignments, you will learn about various types of fact sources (Step 7); the use of indexing and abstracting tools (Step 6); and the evaluative process (Step 8).

A38

GENERAL SEARCH STRATEGY: A MODEL

SEARCH STRATEGY STEPS	*INTERACTIONS WITH THE LIBRARY*
1. Select general subject of interest	
2. Background information Locate background information on the subject for orientation to established knowledge about the subject, and to get references to important materials	Consult background reference sources, e.g., general encyclopedias, specialized background information sources
3. Additional background information Get an overview of the literature that has been published about the subject	Consult specialized bibliographies that cover the subject
4. Restate the topic Based on what is learned from the background sources, focus the topic and restate it	
5. Extensive information Find relevant books in the Library pertaining to the focused topic	Use the card catalogs
6. Additional extensive information Find relevant journal articles, reports, essays, and other materials on the focused topic	Use indexing and abstracting tools
7. Fact information Find fact sources relevant to the focused topic in order to verify data, understand specialized terminology, etc.	Use fact reference sources
8. Evaluation Evaluate the materials located for their pertinence to the focused topic and their value for research	Use reference sources to obtain the information on which, in part, these assessments are based
9. Compile working bibliography	
10. Begin reading	

FACT REFERENCE SOURCES: IN-CLASS WORKSHEET

Fact reference sources are used when your need for information requires that you locate a concise presentation of factual data or some other kind of specific information.

Basic types of fact reference sources:

Almanac	Gazetteer
Atlas	Handbook
Biographical dictionary	Statistical source
Directory	Yearbook

The purpose of this exercise is to give you some personal experience with a type of fact reference source. You will then share what you learn with the class.

In groups of two, you have 15 minutes or so to go through the following steps:

A. Examining Your Fact Reference Source

1. Examine the fact reference source you've been given. Look for features mentioned below (some points will apply to the source you have, some won't). TALK with each other and make brief notes in the spaces provided.

   a. How is the information arranged?

   (Begin by looking at the table of contents, if there is one; look over the introduction; quickly browse through the book.)

   _____

   _____

   _____

   Why do you think the information is arranged that way?

   _____

   b. How does one find specific information in your source? Is there an index? (If so, is there anything special about it--e.g., is it particularly detailed? if yes, why is that?) If there is no index, why not?

   _____

   _____

   c. If your source provides statistical data or other data in tables, are the sources for those data referenced? How?

   _____

   d. Does your source provide references to additional sources of information? How is this done?

   _____

   _____

A40

2. Drawing on what you've learned by examining your source, answer the following:

   a. What does this type of fact reference source do, i.e., what is its purpose?

   _____

   _____

   _____

   b. Why and/or when do you think you'd want to use this type of fact reference source?

   _____

   _____

   _____

B. Locating Fact Reference Sources Through the Subject Card Catalog

NOW: Read the description on the handout "Selected Types of Fact Reference Sources" that applies to the one you've examined. If you have a biographical dictionary, read the appropriate information on the handout "Finding Biographical Information: A Guide."

1. Working together, construct what you believe would be the complete Library of Congress subject heading to use in the Subject Card Catalog to locate this source.

   Note the following (does not apply to those who have gazetteers or almanacs):

   - As was the case with the background reference sources you used in the last assignment, the main subject heading represents the *subject area* covered; the form subdivision represents the *type* of source, indicating how the information is organized or in what format it is presented.
   - You will not be able in class to refer to Library of Congress Subject Headings to determine the authorized term for the main subject heading. Talk with each other and decide on one that is reasonable and likely.
   - The appropriate form subdivision to use for your source is given with the description of it on the handout.

   In the space below, write the complete subject heading you believe would be used for this fact reference source:

   _____

2. AFTER you have come to a decision about what the complete subject heading would be, ask me for a copy of the subject catalog card for your source, and you can check whether you've understood how to construct a subject heading that provides access to this type of fact reference source.

C. Sharing What You've Learned With the Class

Towards the end of the class, we will discuss each of the types of fact reference sources. You might want to review the notes you've made so that you have something to contribute to that discussion.

TABLE OF INFORMATION ABOUT FACT REFERENCE SOURCES

Type of source	Arrangement of information	Depth of information: fact/background	References provided?	Purpose (why/when would you use?)	Access: Subject heading--form subdivision
ALMANAC					
ATLAS					
BIOGRAPHICAL DICTIONARY					
DIRECTORY					
GAZETTEER					
HANDBOOK					
STATISTICAL SOURCE					
YEARBOOK					

A41

Feinberg Library/PSUC LIB101 (A42)

Name _____

Section _____ Instructor _____

FACT REFERENCE SOURCES

Introduction

Many information problems require the location of facts of various kinds: a statistic, a formula, the date of a certain event or sequence of events, brief information about a person. Previous assignments have introduced basic distinctions between fact and background reference sources. Additional knowledge of the types of information found in a range of fact reference sources, along with the ability to locate such sources efficiently, will facilitate the identification of a particular source appropriate to answering a given information need.

These exercises introduce the process of relating information problems to various types of fact reference sources (Exercise I); introduce the use of form subdivisions in combination with authorized subject headings to locate fact reference sources (Exercise II), and biographical reference sources (Exercise III); and ask you to compare background reference sources to fact reference sources (Exercise IV).

Exercise I: Relating Information Problems to Types of Fact Reference Sources

Successful solution of information problems involving facts requires that you first be able to relate the need for a certain kind of factual information to the type of fact reference source most appropriate to use in that instance.

Directions: Prior to doing this exercise, read the handout "Selected Types of Fact Reference Sources."

1) Analyze each information problem for the kind of information required.

2) Of the types of fact reference sources listed below, determine which one would be the best to consult for the information needed.

TYPES OF FACT REFERENCE SOURCES		
	Almanac	Handbook
	Atlas	Statistical source
	Directory	Yearbook
	Gazetteer	

Examples of fact reference sources are on a table in the Alcove of the Reference Room.

* * * * * * * * * * * * * * * * * * *

1. You are planning a fieldtrip for your 6th grade class and need a source that shows the location of historic battle sites in the Buffalo, New York area.

   Type of fact reference source best to use: _____

2. You need summaries of U.S. actions in its foreign relations with Latin American countries for each of the past five years.

   Type of fact reference source best to use: _____

3. You want to get a job in a social service agency and need a list of county social service departments in New York state.

   Type of fact reference source best to use: _____

4. You need to know the chemical characteristics of phosphate acids commonly used in processed foods.

   Type of fact reference source best to use: _____

A43

5. In what state is Donner Pass located?

   Type of fact reference source best to use:_____

6. You need to know which state, Kentucky or North Carolina, produces the greater amount of tobacco, and the yields per acre in each.

   Type of fact reference source best to use:_____

Exercise II: Locating Fact Reference Sources Through the Subject Card Catalog

Using the Subject Card Catalog to locate fact reference sources requires that you identify a Library of Congress subject heading appropriate to the information problem and combine it with the correct form subdivision for the type of source needed.

As in all subject searches, flexibility is necessary. Suppose, for example, that you needed detailed maps of Oklahoma. The most specific subject heading to use in the Subject Card Catalog to address this information problem would be OKLAHOMA--MAPS. However, if the Library does not have an atlas of Oklahoma, you would not find that specific subject heading and subdivision combination used in the Subject Card Catalog. You would then broaden the scope of your search and consult the Subject Card Catalog using the subject heading UNITED STATES--MAPS. On the other hand, were you looking for detailed statistics on wheat crops, you would easily recognize that there is not likely to be a statistical source devoted entirely to wheat. You would want to relate the topic of wheat to the appropriate broader subject and your search, in this case, would begin with the subject heading AGRICULTURE--STATISTICS.

Directions: Prior to doing this exercise, review the handout "Selected Types of Fact Reference Sources."

1) Read through each information problem to determine which type of fact reference source would be best to use to supply the information required.

2) Identify the authorized Library of Congress subject heading appropriate to the subject of the information problem. Combine that subject heading with the appropriate form subdivision (see CHART below), and use the Subject Card Catalog to identify a fact reference source that provides the needed information.

3) Note title and call number of the fact reference source.

4) Locate the source in the Reference Collection and check that it contains the information required.

CHART

TYPE OF FACT REFERENCE SOURCE NEEDED		*Form Subdivision to Use*
Atlas	use	--MAPS
Directory	use	--DIRECTORIES
Handbook	use	--HANDBOOKS, MANUALS, ETC.
Statistical source	use	--STATISTICS
Yearbook	use	--YEARBOOKS

A44

EXAMPLE: You need data on electrochemical reactions of organic compounds.

a. Type of fact reference source best to use: handbook

b. Complete subject heading to use in the Subject Card Catalog:
CHEMISTRY, ORGANIC--HANDBOOKS, MANUALS, ETC.

c. Title: CRC Handbook Series in Organic Electrochemistry

d. Call number: Ref. QD272.E4C17

1. Locate a reference source that shows the world distribution of culture areas, tribal groups, and other ethnographic features of interest to the study of anthropology.

   a. Type of fact reference source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   d. Call number: _____

2. Locate a reference source that provides condensed, detailed information about parliaments and other legislative bodies in the world.

   a. Type of fact reference source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   d. Call number: _____

3. Locate a reference source that provides annual summaries of foreign affairs.

   a. Type of fact reference source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   d. Call number: _____

Exercise III: Locating and Using Biographical Reference Sources

On various occasions, you may need to locate the type of biographical information that is provided by biographical reference sources. For example, you may need information about a person not famous enough (or too recently famous) to be the subject of a book; or, you may want a brief overview of a person's life in order to focus your research on some major contributions, or a particularly interesting period of accomplishment; or, you may need information about an author's scholarly qualifications to help you evaluate something that person has written.

Directions: Prior to doing this exercise, read Feinberg Library Guide No. 6, "Finding Biographical Information: A Guide," which describes types of biographical reference sources and their accessibility through the Subject Card Catalog.

1) Based on the information provided, determine which type of biographical reference source is the best to use: *universal*, *national*, or *occupational*.

2) If the type of source required is *universal*, locate and use the universal biographical reference sources listed on Feinberg Library Guide No. 6. If the source needed is *national* or *occupational*, use Library of Congress Subject Headings and the Subject Card Catalog to identify the authorized subject heading for the geographic area (for national sources), or for the occupation (for occupational sources). Combine this subject heading with the form subdivision --BIOGRAPHY, or --BIOGRAPHY--DICTIONARIES.

3) Consult the Subject Card Catalog under the subject heading and subdivision combination. Note down title and complete call number.

   IMPORTANT: Be sure to select reference sources, rather than books on the open stacks.

4) Locate the biographical source in the Reference Collection and indicate the page(s) on which the information is found.

EXAMPLE: What are the major contributions of Yves Saint Laurent to fashion design?

a. Type of biographical source best to use: occupational

b. Complete subject heading to use in the Subject Card Catalog:

COSTUME DESIGNERS--BIOGRAPHY

c. Title: Who's Who in Fashion

Call number: Ref.TT505.A1S73

d. Information is on page(s): 90-93 (for multi-volume sets, in vol.: ___)

* * * * * * * * * * * * * * * * * *

1. Among jazz music enthusiasts, Lionel Hampton is most noted as a vibist, but he is also an accomplished drummer and a flashy pianist. Locate a biographical reference source that provides brief information about him.

   a. Type of biographical source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   Call number: _____

   d. Information is on page(s): _____ (for multi-volume sets, in vol. ___)

2. What did Emmeline Pankhurst do to achieve fame?

   a. Type of biographical source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   Call number: _____

   d. Information is on page(s): _____ (for multi-volume sets, in vol.: ___)

3. Isvar Chandra Vidyasagar was born in India in 1820. Due to his many contributions in the public sphere in that country, one writer has commented that "his name will long be remembered by his countrymen." Locate a biographical reference source that provides brief information about him.

   a. Type of biographical source best to use: _____

   b. Complete subject heading to use in the Subject Card Catalog:

   _____

   c. Title: _____

   Call number: _____

   d. Information is on page(s): _____ (for multi-volume sets, in vol.: ___)

Exercise IV: Comparing Background and Fact Reference Sources

In the last assignment, and in doing your Topic Tracer Part I, you used background reference sources; in doing this assignment, you have become familiar with various types of fact reference sources.

Compare background reference sources to fact reference sources, taking into consideration the use for which they are designed, the extent of information they provide, the arrangement of information within the source, and the guidance provided to additional sources.

_____

_____

_____

_____

_____

_____

_____

_____

SELECTED TYPES OF FACT REFERENCE SOURCES

Fact reference sources are used to answer specific, factual, information needs. These sources present brief, condensed summaries of information; in organization and format, they are designed so that the information they contain is readily accessible and easily consulted. Many fact reference sources are compendia of information important to a particular subject area or discipline and are intended to be relatively comprehensive for the field covered.

Fact reference sources can be identified through the Subject Card Catalog in the manner specified in the descriptions below.

ALMANAC: A general compendium of useful information and statistics about countries, individuals, events, and miscellaneous subjects. The most comprehensive in subject matter coverage of all fact reference sources, almanacs provide brief, summary information concerning many areas of knowledge. Detailed indexes afford access to material on specific subjects. Though the range of subject matter coverage is broad, primary emphasis is given to subjects associated with the country in which the almanac is published.

Access: Consult the Subject Card Catalog under the subject heading ALMANACS, or the subject heading ALMANACS qualified by the country of primary orientation, e.g., ALMANACS, CANADIAN.

ATLAS: A volume containing a collection of maps. Atlases illustrate various types of spatial relationships. Most atlases are geographic; in scope, these may be general (e.g., the world), limited to a defined geographic area (e.g., a continent, country, region), or thematic (e.g., climate, agriculture, economics). Other atlases illustrate nongeographical spatial relationships (e.g., anatomy).

Access: To locate geographical atlases, consult the Subject Card Catalog under the Library of Congress subject heading for the geographic area combined with the form subdivision --MAPS, e.g., AFRICA--MAPS. To locate nongeographical atlases, consult the Subject Card Catalog under the Library of Congress subject heading representing the subject of interest combined with the form subdivision --ATLASES, e.g., OBSTETRICS--ATLASES.

DIRECTORY: An ordered list of brief identifying information about individuals, or groups, having some relationship in common. The relationship may be shared, geographically-based use of a service (e.g., phone directories), mutual professional affiliation (e.g., directories of professionals in an occupational field), or shared pursuit of other endeavors (e.g., directories of labor unions). Information provided may include names, addresses, phone numbers, descriptions of organizational activities, or other miscellaneous key informative data.

Access: To locate directories, consult the Subject Card Catalog under the Library of Congress subject heading representing the subject of interest combined with the form subdivision --DIRECTORIES, e.g., CONSUMER PROTECTION--DIRECTORIES.

GAZETTEER: A dictionary of geographical place names with locational information (e.g., geographical coordinates) and, frequently, brief descriptive information. Place names may include those of populated areas (e.g., cities, towns, counties), or geographic features (e.g., mountains, rivers). Gazetteers are similar in format and purpose to map indexes published in atlases, but are generally more comprehensive.

Access: To locate gazetteers, consult the Subject Card Catalog under the subject heading GEOGRAPHY--DICTIONARIES.

HANDBOOK: A compilation of information in a subject field or discipline representing a distillation of important, generally accepted knowledge established by research or practice. Bibliographic references document the sources from which the data or other information are taken. Information may be narrative and/or tabular, and is usually presented in chapters that treat specializations within the subject or discipline; usually includes a detailed index.

Access: To locate handbooks in most subject areas, consult the Subject Card Catalog under the Library of Congress subject heading representing the area of knowledge or discipline of interest combined with the form subdivision --HANDBOOKS, MANUALS, ETC., e.g., NURSING--HANDBOOKS, MANUALS, ETC.; or (in some scientific fields) the form subdivision --TABLES, e.g., BIOLOGY--TABLES.

STATISTICAL SOURCE: An organized compilation of numerical facts. Statistical sources may present data pertaining to a variety of subjects for geographic areas (e.g., all countries of the world, Latin America, Canada); or may focus on a particular subject (e.g., trade, fertility, agriculture). Statistics are numerical records of conditions that undergo change over time, and most statistical sources are published on a continuing basis.

Access: To locate statistical sources, consult the Subject Card Catalog under the Library of Congress subject heading representing the subject of interest combined with the form subdivision --STATISTICS, e.g., WATER-SUPPLY--STATISTICS.

YEARBOOK: An annual compilation of data and other information recording the year's activities in some specific subject or field of endeavor. Emphasis is on summarizing important information about trends or accomplishments of the current (or just previous) year.

Access: To locate yearbooks, consult the Subject Card Catalog under the Library of Congress subject heading representing the subject of interest combined with the form subdivision --YEARBOOKS, e.g., COMMUNIST PARTIES--YEARBOOKS.

Name _____

Section _____ Instructor _____

ACCESS TO PERIODICAL LITERATURE

Introduction

In recent assignments, you have learned how to use the card catalogs and Library of Congress Subject Headings to identify various types of materials useful for special information problems: background reference sources that provide summaries of generally accepted knowledge about a subject; fact reference sources that provide specific and concise data and definitions; and whole books that provide extensive discussion and analysis of particular subjects. Effective use of the card catalogs to identify these types of resources is essential to productive use of the library to solve many of the information problems you encounter.

For various reasons, however, your information need may not be fully met by the exclusive use of books or reference sources: summaries provided by reference sources may not treat your topic in sufficient depth; the topic on which you need discussion may be very specific and not suitable for book-length treatment; the information or research you require may be of very recent origin, and not yet incorporated into books. In these instances, you will want to be able to identify and locate articles published in periodicals.

This assignment introduces you to two types of periodicals (Exercise I); to indexing and abstracting tools used to locate periodical articles on specific topics (Exercise II); and has you reflect on the differences between indexing and abstracting tools (Exercise III).

Exercise I: Types of Periodicals

Periodicals are publications issued on some regular and continuing schedule (e.g., weekly, monthly, quarterly), containing articles on a variety of topics. There are two categories of periodicals: magazines, and journals. In identifying articles useful to research on a topic, it is important to recognize the differences between magazines and journals: articles published in each type are distinctive in their treatment of topics, in the authoritativeness of that treatment, and in the guidance provided to additional sources of information. In addition, some style manuals (Turabian's Manual included) require different citation formats for magazine as opposed to journal articles.

Magazines are periodicals whose articles are written for general audiences. Their focus and treatment of topics is aimed to be informative to the layperson and, in some instances, to the practitioner. Typically, magazine articles are discussions, commentaries, or summaries, and do not include footnotes or bibliographic references which document sources or authorities used. *Journals*, by contrast, are periodicals addressed to specific audiences. Their focus and treatment of topics is aimed to be informative to researchers and others with academic interests in the specified field of study. In general, journal articles are either original reports of research, or theoretical discussions of academic topics, which transmit new knowledge to other scholars; authors of journal articles use bibliographic references to document sources used, and to integrate new findings and their interpretation into the context of existing knowledge. It is a peculiarity of the publishing world that some periodicals that are magazines use the word "journal" in their titles, and that some periodicals that are journals use the word "magazine" in their titles. The distinction between magazine and journals is based on their distinguishing characteristics, *not* on the words used in their titles.

Directions: 1) Examine the periodicals on the "Selected Periodicals" worktable in the Alcove of the Reference Room.

2) Indicate below the titles of two periodicals that are magazines (A), and two periodicals that are journals (B).

A. Titles of two periodicals on the worktable that are magazines:

1. _____

2. _____

B. Titles of two periodicals on the worktable that are journals:

1. _____

2. _____

Exercise II: Periodical Indexing and Abstracting Tools

Periodical indexing and abstracting tools provide access to articles on specific subjects. Each periodical indexing and abstracting tool affords coverage of a distinctive range of periodical titles, supplying the bibliographic information necessary to the identification of individual articles. Published on a regular schedule, these tools provide continuous and updated (as well as retrospective) coverage of various portions of the periodical literature.

In *indexing tools*, an entry consists of information identifying a specific article, and is listed under an alphabetically arranged subject term that represents the content of the article. Each indexing tool uses its own set of subject terms, as is appropriate to the subject matter covered; cross references assist in the identification of subject headings suitable to particular information problems. Indexing tools are designed with the general user in mind, and are devised to provide comprehensive, direct subject access to the contents of a specified list of periodical titles.

In *abstracting tools*, an entry consists of information identifying a specific article (or other publication), and is accompanied by an abstract, which is a brief representation of the content of the publication. These entries are arranged according to a conceptual classification scheme that corresponds to the research specializations within the particular field of study, and are numbered consecutively. Abstracting tools have separate subject and author indexes that refer the user to specific abstract entries by these numbers. Many abstracting tools publish subject heading authority lists (similar in construction and function to Library of Congress Subject Headings) to assist the user in identifying appropriate subject terms to use in searching that particular tool. Abstracting tools are designed with the researcher in mind, and are devised to provide comprehensive intellectual organization for all significant contributions (journal articles, as well as other publications) of potential interest to the scholar in the particular field of study.

As is the case with most reference books, periodical indexing and abstracting tools include directions for their use on introductory pages; refer to these to solve specific problems you may encounter as you use them. Lists of abbreviations used for periodical titles, and lists of specific periodical titles covered, are printed in the tool itself (frequently on introductory pages), or in an accompanying publication; for some tools, these lists are checked to indicate periodical titles subscribed to by this Library. Copies of a Serials List (compiled December 1979) indicating Library periodical holdings are also available at the Reference Desk. However, the Library's single authoritative record of periodical holdings is the Kardex File of Periodicals, located in the Periodicals Room.

A51

A. Indexing Tools

Directions: 1) Relate your Topic Tracer topic to a subject field and select an appropriate *indexing tool* (other than Readers' Guide) from those listed on the handout "Selective Subject Guide to Indexing and Abstracting Tools."

2) Locate that indexing tool. Use it to identify a recent, relevant journal article on your topic that is also in the Library.

3) Find the journal article and write a complete bibliography citation for it in the style specified by Turabian's Manual.

Briefly indicate what your Topic Tracer topic concerns (to jog my memory):

_____

_____

1. Title of *indexing tool* you have selected to use:

_____

2. Locate and use the indexing tool to identify a *recent* (e.g., 1978 or later) *journal article* that is *relevant* to your topic *that is also in the Library.* If the indexing tool you select to use provides access to both journal articles and other types of publications, be sure to select a journal article.

   a. Year, volume number, or issue of the indexing tool used: _____

   b. Subject heading used: _____

3. Use the Kardex File of Periodicals in the Periodicals Room to locate the journal and the specific issue in which the article appears. *Find the article.* Using correct Turabian format for a *journal article*, write a complete bibliography citation for your article:

_____

_____

_____

_____

B. Abstracting Tools

Directions: 1) Relate your Topic Tracer topic to a subject field and select an appropriate *abstracting tool* from those listed on the handout "Selective Subject Guide to Indexing and Abstracting Tools."

2) Locate that abstracting tool. Use it to identify a recent, relevant publication on your topic *that is also in the Library.*

IMPORTANT NOTES

a. If you use Sociological Abstracts, identify an abstract in the main section of the tool, not one in a supplement; abstracts in the supplements are distinguished by an abstract number that includes an S, e.g., 77S012392.

b. If you use Psychological Abstracts, do not select references to Dissertation Abstracts International, which is a journal of abstracts of dissertations, not a journal with scholarly articles.

c. If the abstracting tool you use publishes a subject heading authority list, be sure to use that list to assist you in determining the most suitable subject headings to use in your search.

1. Title of *abstracting tool* you have selected to use:

_____

2. Locate and use the abstracting tool to identify a *recent* (e.g., 1978 or later) publication that is *relevant* to your topic *that is also in the Library.*

   a. Year, volume number, or issue of the abstracting tool used: _____

   b. Subject heading used: _____

   c. Abstract number: _____

   d. Write down complete bibliographic information identifying the publication on your topic. (In this case, you don't have to write a correct Turabian citation, though you may, of course, if you wish. Simply write down *all the bibliographic information required* to *uniquely* identify the publication.)

   _____

   _____

   _____

   _____

   e. *Verify that this publication is in the Library.* If you have used Resources in Education or Environment Index/Abstracts: Remember that copies of most of the publications abstracted in these tools are available in microfiche format (in cabinets on the 3rd level of the Library in the Microform Area). If your publication is a book, you will, of course, use the Author/Title Card Catalog to verify that the Library has a copy. If you have problems with this step, please see me.

Exercise III: Differences Between Indexing and Abstracting Tools

Consider the indexing tool you used in part A of the previous exercise, and the abstracting tool you used in part B of that exercise. In your own words, summarize the differences between the two types of tools, taking into consideration such points as: the approach used to search each type; the arrangement of entries in each; information provided in the entries; the usefulness of each to the student.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

SELECTIVE SUBJECT GUIDE TO INDEXING AND ABSTRACTING TOOLS

IT = Index Table
IA = Index Area

GENERAL AND MULTI-DISCIPLINARY: These tools cover several subject areas

British Humanities Index Indexes scholarly British journals in humanities (e.g., music, literature, history), and in some social sciences (e.g., psychology). *IA Ref.A13.B7*

Canadian Periodical Index Indexes a variety of periodicals published in Canada. *IT 1*

Humanities Index Indexes scholarly journals in archaeology, classical studies, folklore, history, language and literature, literary criticism, philosophy, & religion. *IT 2*

Public Affairs Information Service. Bulletin (PAIS) Indexes periodicals (and some books, pamphlets, and government documents) in current public affairs. *IT 4*

Readers' Guide to Periodical Literature Indexes magazines of popular, general interest.

Social Sciences Index Indexes scholarly journals in anthropology, economics, environmental science, geography, criminology, political science, psychology, and sociology. *IT 2*

*DISCIPLINE- AND SUBJECT-ORIENTED: These tools cover specific subject areas (abstracting tools indicated by *)*

Subject	*Title*
Alcohol	*Journal of Studies on Alcohol *IA Ref.RC565.Q37*
Anthropology	*Abstracts in Anthropology *IA Ref.GN1.A15* International Bibliography of Anthropology *IA Ref.Z7161.I593*
Art	Art Index *IT 1*
Biology	*Biological Abstracts *IA Ref.QH301.B37* Biological and Agricultural Index *IT 6*
Business	Accountant's Index *IT 2* Business Periodicals Index *IT 2*
Chemistry	*Chemical Abstracts *IA Ref.QD1.A51*
Computers	Computing Reviews *IA Ref.QA76.C5854*
Economics	Index of Economic Articles *IA Ref.Z7164.E2A57* International Bibliography of Economics *IA Ref.Z7164.E2I58* *Journal of Economic Literature *IA Ref.HB1.J6*
Education	Current Index to Journals in Education *IT 3* Education Index *IT 3* *Resources in Education *IT 3*
Environment	*Environment Index/Abstracts *IT 5*
Geology	Bibliography and Index of Geology *IA Ref.Z6031.G4*
History	*America: History and Life *IA Ref.Z1236.A48* *Historical Abstracts *IA Ref.D299.H5*
Literature	MLA International Bibliography *IA Ref.P1.M63*
Medicine	Abridged Index Medicus *IT 6* Index Medicus *IA Ref.Z6660.I42*
Music	Music Index *IA Ref.ML118.M84* *RILM Abstracts *IA Ref.ML1.I83*
Nursing	Cumulative Index to Nursing and Allied Health Literature *IT 6* International Nursing Index *IT 6*
Philosophy	*Philosopher's Index *IA Ref.B53.B54*
Physics	*Physics Abstracts *IA Ref.Q1.S3*
Political Science	International Bibliography of Political Science *IA Ref.Z7163.I64* *International Political Science Abstracts *IA Ref.JA36.I5* *United States Political Science Documents *IA Ref.JA36.P64*
Psychology	*Psychological Abstracts *IT 5*
Science & Technology	Applied Science and Technology Index *IT 6*
Sociology	International Bibliography of Sociology *IA Ref.Z7161.I594* *Sociological Abstracts *IT 4*
Speech and Hearing	*DSH Abstracts *IT 6*
Women's Studies	*Women's Studies Abstracts *IA Ref.Z7962.W65*

A53

Name _____

Section _____ Instructor _____

RESEARCHING THE SOCIAL SCIENCES

Introduction

Social sciences research is concerned with data generated by people, and with data about the behavior of people. The scholarly fields of study that comprise the social sciences are traditionally thought to include anthropology, economics, education, geography, history, political science, psychology, and sociology. The literature of the social sciences can be grouped into three categories: 1) Professional, scholarly reports of research, published as journal articles and books; 2) Social data (e.g., statistics, records of events, or news reports); and 3) Commentary on social issues (e.g., advocacy positions, often on controversial societal problems). Each type of information has research value, and each contributes to the work of the social scientist.

This assignment introduces you to a number of tools useful for identifying literature pertinent to social science research. Each type of tool has a particular focus which, in a broad sense, matches the three categories of social science literature enumerated above.

Discipline-oriented abstracting tools are used to identify the professional, scholarly research that is reported in journal articles. The method of access in the abstracting tool reflects this professional and scholarly orientation. Newspaper articles constitute a portion of the social data that the researcher uses; an index to a major newspaper, such as the New York Times Index, is therefore helpful to the process of identifying data important to the social scientist. Publications of the United States federal government may be important to all three categories: the government funds original research, and publishes the results of that research; many statistical compendia of data are generated by the government's various census activities; and the U.S. Congress investigates current, societal problems, and publishes records of those investigations. As an index to federal government documents, the Monthly Catalog of United States Government Publications is a valuable tool for research on many social science topics.

Finally, it is not enough to simply locate material in the Library; that material should be evaluated as well. The researcher must address such questions as: Is the information in the source current? Is the author of the material an authority in the field? Is the source respected by others?

These types of evaluative questions lead to a judgment of the worth of the information in the source that one has found. The tool used to evaluate material in this assignment is the selective bibliography.

This assignment introduces you to the selective bibliography as a tool for choosing books on a topic (Exercise I); reacquaints you with discipline-oriented abstracting tools (Exercise II); and introduces you to the New York Times Index (Exercise III) and to the Monthly Catalog of United States Government Publications (Exercise IV). In the process of using these tools, you explore differences between an evaluative annotation, a descriptive annotation and an abstract; and you write a descriptive annotation for a publication (Exercise V).

Notice that a portion of this assignment takes place at a worktable labelled "Researching the Social Sciences," in the Alcove of the Reference Room.

A55

YOUR TOPIC FOR THIS ASSIGNMENT

You are interested in the problems of the Palestinian refugees, some of whom have become guerrilla fighters as a consequence of the Arab-Israeli Conflict in the Near East.

Exercise I: Selective Bibliographies

Selective bibliographies bring together citations to materials on specialized topics in creative and organizing ways. Annotations describing the materials often accompany the citations. If the annotation is evaluative, the authority of the source and its worth as a scholarly contribution can be ascertained.

Examine the selective bibliographies on the worktable and identify the one that is appropriate for researching the topic indicated above. Familiarize yourself with its arrangement and use, and consult its Table of Contents.

A. Use the selective bibliography to identify a *recommended* book on the topic *that is also owned by Feinberg Library.*

1. Following the style specified by Turabian's Manual, write a correct bibliography citation for this recommended book:

_____

_____

_____

_____

2. What is the call number of this book?_____

B. Record below those phrases in the annotation that *evaluate* the book:

_____

_____

_____

Exercise II: Discipline-Oriented Abstracting Tools

Journal articles are scholarly communications and often contain more recent information on more specific topics than can be found in books. Abstracting tools function to assist the researcher in identifying journal articles that concern particular topics; in addition, the abstracts in these tools provide the researcher with brief representations of the contents of the articles.

Locate Historical Abstracts in the Index Area of the Reference Collection (Index Area Ref.D299.H5).

A. Use the subject index for vol. 24, Part B, 1978 to identify a journal article about refugees who are Palestinians.

1. Subject heading used in subject index:_____
2. Abstract number:_____
3. Following the style specified by Turabian's Manual, write a correct bibliography citation for this article:

_____

_____

_____

B. Carefully read through the abstract of the journal article.

1. Does the abstract *evaluate* the article? ___yes; ___no
2. How does the information given in the abstract differ from the information provided by the annotation you used in Exercise I? Explain.

_____

_____

C. Is *this specific* journal article available in Feinberg Library? ___yes; ___no. If yes, in what format? ___bound; ___unbound; ___in microform.

Exercise III: New York Times Index

The New York Times considers itself to be a "newspaper of record," and is therefore an important documentary source. It is both a current research tool useful for identifying newsworthy studies and surveys, and, because it began publication in 1851, the New York Times is also important to historical research.

Locate the New York Times Index in the Index Area of the Reference Collection (Index Area Ref.AI21.N44). Use the New York Times Index volume for 1977 to identify a New York Times article about United Nations (UN) aid to Palestinian refugees. (Note: Articles about this topic are indexed under a subheading for "Refugees and Expatriates" towards the end of the entries indexed under the main heading "Middle East--Israeli-Arab Conflict.")

A. Entry in the New York Times Index for an article on this topic (record the first 10 words or so):

_____

B. Date (*in full*) of the newspaper issue in which this article was published:

_____

C. Page number and column number where that article was printed (if the article was published in a Sunday edition of the paper, include the section number):

Section_____; Page_____; Column number_____

D. In general terms, what is the length of this particular newspaper article? _____

Exercise IV: Monthly Catalog of United States Government Publications

One of the functions of the U.S. federal government is to investigate problems that affect the national interest. In a broad sense, the actions of all Americans fall within the purview of the government's concern. Statistical data, research studies, and informative discussions are generated and published by the federal government; all are valuable research resources for the social scientist.

Locate the Monthly Catalog of United States Government Publications on the "Indexes to Documents" shelves in the Government Documents Room (entrance through Reference Room).

Use the cumulative Subject Index to the 1980 issues of the Monthly Catalog to identify a government document that concerns the United Nations Relief and Works Agency for Palestinian Refugees in the Near East.

A. Monthly Catalog entry number for this document:_____

B. Title of document:_____

_____

C. Superintendent of Documents classification number:_____

D. Check the Government Documents shelflist. Is this particular document owned by Feinberg Library? ___yes; ___no.

A57

EXTRA CREDIT (10 points)

CIS/Index is a comprehensive, in-depth index to all publications (with the exception of the Congressional Record) emanating from the U.S. Congress. It is an important tool for identifying documents that include transcripts of testimony given at Congressional hearings, reports of Congressional-sponsored studies, and other materials reflecting Congress' role in lawmaking and oversight activities.

Locate the 1980 CIS Annual Index and Annual Abstracts volumes on the "Indexes to Documents" shelves in the Government Documents Room. Use the "Index of Subjects and Names" in the 1980 Annual Index volume to identify a Congressional publication on political, economic, and social issues relating to Palestinians.

A. Number from the Index volume to use in the Abstracts volume for this publication: _____

B. Consult the Abstracts volume under this number.

1. Title of publication: _____

2. Superintendent of Documents classification number: _____

3. Pages within this document for a paper on the "Palestinian Issue:" _____

C. Is this document in Feinberg Library? ___yes; ___no.

Exercise V: Writing a Descriptive Annotation

Writing a descriptive annotation presents you with the opportunity to thoughtfully examine and then briefly summarize the most important attributes about a publication and its contents.

Return to the worktable labelled "Researching the Social Sciences" in the Alcove of the Reference Room. On the worktable are a number of U.S. federal government documents on a variety of topics. Select one of these publications. *Using your own words*, write a descriptive annotation of the document. (Refer to the handout, "Annotations and Abstracts: Definitions and Examples," for guidance.)

Title of document: _____

Superintendent of Documents classification number: _____

Descriptive annotation:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

A58

Name _____

Section _____ Instructor _____

RESEARCHING THE SOCIAL SCIENCES: ALTERNATIVE ASSIGNMENT

If your topic concerns one of the social sciences, you may use this assignment to locate materials that pertain to your Topic Tracer topic and that you may want to incorporate into your final project for this course.

Introduction

Social science research is concerned with data generated by people, and with data about the behavior of people. The disciplines that comprise the social sciences are traditionally thought to include anthropology, economics, education, geography, history, political science, psychology, and sociology. The literature of the social sciences can be grouped into three categories: 1) professional, scholarly research, which is published as journal articles, books, or reports; 2) social data, which may be statistics, records of events, or news reports; and 3) commentary on social issues, which are advocacy positions, often on controversial societal problems. Each type of information has research value, and each contributes to the work of the social scientist.

This assignment introduces you to a number of tools that are useful for identifying literature pertinent to social science research. Each type of tool has a particular focus which, in a broad sense, matches the three categories of social science literature enumerated above. Discipline-oriented abstracting tools are used to identify the professional, scholarly research that is reported in journal articles. The method of access in the abstracting tool reflects this professional and scholarly orientation. Newspaper articles constitute a portion of the social data that the researcher uses, and an index to a major newspaper, such as the New York Times Index, is therefore helpful to the process of identifying data important to the social scientist. Publications of the United States federal government are actually important to all three categories: the government funds original research, and publishes the results of that research; many statistical compendia of data are generated by the government's various census activities; and the U.S. Congress investigates current, societal problems and publishes records of those investigations. As an index to federal government documents, the Monthly Catalog of United States Government Publications is a valuable tool for research on many social science topics.

Finally, it is not enough to simply locate materials in the Library; the materials should be evaluated as well. The researcher must address such questions as: Is the information in the source current? Is the author of the material an authority in the field: Is the source respected by others: These types of evaluative questions lead to a judgment of the worth of the information in the source that has been found. The tool used to evaluate material in this assignment is the selective bibliography.

This assignment introduces you to the selective bibliography as a tool for selecting books on a topic (Exercise I); reacquaints you with discipline-oriented abstracting tools (Exercise II); introduces you to the New York Times Index (Exercise III) and to the Monthly Catalog of United States Government Publications (Exercise IV); and presents you with the option of exploring a tool that indexes and abstracts Congressional publications (extra credit).

In the process of using these tools, you examine the differences between an evaluative annotation, a descriptive annotation, and an abstract, and write a descriptive annotation for a publication (in Exercise IV).

A59

Briefly state your Topic Tracer topic, to remind me what you're doing:

_____

Exercise I: Selective Bibliographies

Selective bibliographies bring together citations to materials on specialized topics in creative and organizing ways. Annotations describing the materials often accompany the citations. If the annotation is evaluative, the authority of the source and its worth as a scholarly contribution can be assessed. Yet, even with an annotation, the inclusion of a publication in a selective bibliography indicates that the compiler has made a judgment about its probable worth and usefulness.

Use the Subject Card Catalog to identify a selective subject bibliography that would include citations to publications on your topic. (If you elected to locate a selective bibliography on your topic in doing Topic Tracer Part I, you may use that source.)

A. Complete subject heading used in the Subject Card Catalog:

_____

B. Selective bibliography on your topic:

1. Title: _____
2. Call number: _____

C. Use the selective bibliography to identify a publication on your topic that is also in the Library. Following the format specified by Turabian's Manual, write a complete bibliography citation for this publication:

_____

_____

_____

_____

D. Is this publication annotated in the selective bibliography you are using? ___yes; ___no. *If yes*, briefly summarize what you have learned about the value of this publication to research on your topic. *If no*, briefly indicate why you selected this publication out of those listed, and what you can infer about its probable value to you as a research source:

_____

_____

_____

_____

Exercise II: Discipline-Oriented Abstracting Tools

Journal articles are scholarly communications that often contain more recent information on more specific topics than can be found in books. Abstracting tools identify journal articles on topics and, additionally, provide brief representations of the contents of those articles. Use the "Selective Subject Guide to Indexing and Abstracting Tools" (given to you with your last assignment) to identify an abstracting tool that provides access to journal literature on your topic.

Title of abstracting tool selected: _____

A60

Use the abstracting tool to identify an abstract for a journal article on your topic that is also in the Library.

A. Year, volume number, or issue number of the abstracting tool: _____

B. Abstract number: _____

C. Carefully read through the abstract of the journal article.

1. Does the abstract *evaluate* the article? ___yes; ___no

2. Briefly describe below what the purpose of the abstract seems to you to be, and what information it conveys to you that leads you to select this particular article on your topic:

_____

_____

_____

_____

D. Locate the journal article and, following the style specified by Turabian's Manual, write a bibliography citation for it:

_____

_____

_____

_____

Exercise III: The New York Times Index

The New York Times considers itself to be a "newspaper of record," and therefore is an important documentary source. It is both a current research tool, useful for identifying newsworthy studies and surveys, and, because it began publication in 18[illegible], the New York Times is also important to historical research.

Locate the New York Times Index in the Index Area of the Reference Room (Index Area Ref.AI21.N44), and use it to identify an indexed entry for a story in the New York Times on your topic.

A. Year of the New York Times Index you're using: _____

B. Subject heading used: _____

C. Entry in the New York Times Index for the story on your topic (record the first 10 words or so):

_____

D. Date (*in full*) of the newspaper issue in which this story was published:

_____

E. Page number and column number where that story appears in that issue (if the story is in a Sunday edition of the paper, include section number):

Section: _____; Page: _____; Column: _____. In general terms, what is the length of this particular newspaper article? _____

A61

Exercise IV: Monthly Catalog of United States Government Publications

One of the functions of the United States federal government is to investigate problems that affect the national interest. In a broad sense, the actions of all Americans fall within the purview of the government's concern. Statistical data, research studies, and informative discussions are generated and published by the federal government; all are valuable research resources for the social scientist.

Locate the Monthly Catalog of United States Government Publications on the "Indexes to Documents" shelves in the Government Documents Room. Use the Monthly Catalog and its cumulative subject indexes to identify a government document on your topic.

A. Identifying a Government Document on Your Topic

1. Year of the Monthly Catalog used: _____

2. Subject heading used: _____

   (Note: The subject headings used in the Monthly Catalog are those authorized by Library of Congress Subject Headings. If you have difficulty identifying a subject heading that matches your topic, use Library of Congress Subject Headings to assist you.)

3. Monthly Catalog entry number for your document: _____

4. Title of document on your topic: _____

   _____

5. Superintendent of Documents classification number: _____

6. Consult the Government Documents shelflist. Is this document in the Library?

   ___yes; ___no

B. Go to the worktable in the Alcove of the Reference Room that is labelled "Researching the Social Sciences." Select one of the government documents that is on the worktable and write a descriptive annotation for it. Writing a descriptive annotation presents you with the opportunity to thoughtfully examine and then briefly summarize the most important attributes about a publication and its contents. Refer to the handout, "Annotations and Abstracts: Definitions and Examples," for guidance.

   Title of document: _____

   Superintendent of Documents classification number: _____

   (Note: As an alternative, you may prefer to locate the government publication you identified in part A of this exercise, above, and write a descriptive annotation for this publication that is also on your topic.)

   Descriptive annotation:

   _____

   _____

   _____

   _____

   _____

A62

EXTRA CREDIT (10 points)

CIS/Index is a comprehensive, in-depth index to all publications (with the exception of the Congressional Record) emanating from the U.S. Congress. It is an important tool for identifying documents that include transcripts of testimony given at Congressional hearings, reports of Congressional-sponsored studies, and other materials reflecting Congress' role in lawmaking and oversight activities.

Locate the CIS Annual Index and Annual Abstracts volumes on the "Indexes to Documents" shelves in the Government Documents Room. Use the "Index of Subjects and Names" (or one of the other indexes, if appropriate) in the Index volumes to identify a Congressional publication on your topic. From the Index volume you will pick up a letter/number combination that directs you to the description of the publication in the corresponding Abstracts volume. Note that CIS/Index volumes run from 1970 to current issues (in binders).

A. Year/date of CIS Index volume used: _____

B. Number from the Index volume to use in the Abstracts volume for the publication on your topic: _____

C. Consult the Abstracts volume under this number.

1. Title of publication: _____

2. Superintendent of Documents classification number: _____

3. Does the abstract indicate that there are specific pages within this document that relate to your particular topic? ___yes; ___no

If yes, what pages? _____

D. Is this document in Feinberg Library? ___yes; ___no

ANNOTATIONS AND ABSTRACTS: DEFINITIONS AND EXAMPLES

Introduction

Annotations and abstracts are brief descriptions of the contents of publications. These descriptions assist you in determining whether a particular publication is relevant to your research interests, and how useful it might be to you.

In this course, you are going to write two types of annotations: descriptive, and evaluative. The process of writing these helps you to analyze and appraise materials you encounter in doing research. Although you will not be writing abstracts in this course, you have been exposed to them in your use of discipline-oriented abstracting tools; a definition, as well as an example, of an abstract is included in this handout for the purposes of comparison.

Definitions

Descriptive Annotation

The purpose of a descriptive annotation is to describe and characterize a publication succinctly and with clarity, without criticism or evaluation. This type of annotation is based on your careful analytical examination of the publication. The description should be brief, but should have sufficient detail to enable the reader to judge the publication's probable relevance to research on that subject.

Evaluative Annotation

The purpose of an evaluative annotation is to provide the reader with a brief assessment of the value of the publication. An evaluative annotation includes a brief description of the publication's content, so that the reader can determine whether its subject matter is relevant to his own interests. This description is followed by consideration of such factors as: the publication's scholarly qualities; the author's credentials for writing on the topic; how others have assessed the work (as, for example, in book reviews); and whether the publication has been included in standard, selective bibliographies. An evaluative annotation assesses the quality of the publication, and thus indicates to the reader its probable value to him for research on that subject.

Abstract

An abstract is an abbreviated, accurate representation of a publication's content. It presents, as much as is possible in a brief format, the quantitative or qualitative information (or both) of the original publication. It is a succinct condensation. Whereas an evaluative annotation *judges* the merits of a publication, and a descriptive annotation *describes* a publication, an abstract, by contrast, *represents* its content.

Examples

The following are examples of each type of annotation, and an abstract, of this publication:

U.S. Department of the Interior. National Park Service. Giant Sequoia Ecology: Fire and Reproduction, by H. Thomas Harvey, Howard S. Shellhammer, and Ronald E. Stecker. Scientific Monograph Series No. 12. Washington, D.C.: Government Printing Office, 1980.

A64

Descriptive Annotation

Reports on scientific studies that were undertaken to examine the giant sequoia ecosystem; specifically, the effects of fire on the reproduction of the giant sequoia. Includes discussion of implications that the research has for management of this tree and its ecosystem.

Evaluative Annotation

A culmination of research of the past two decades, this book presents the findings of a series of studies that have examined how fire effects the reproduction of the giant sequoia tree. The studies reported build on the research conducted by Richard J. Hartesveldt, who pioneered the study of the sequoia ecology. The knowledge gained from that work is combined with additional ecological studies done by the three authors with the aim of improving forest management of this ecosystem. The authors are recognized scientists in their fields; all are associated with San Jose State University, in California. Although this particular book is too current to have been reviewed or cited by others pursuing similar research, all of the authors have previously published scientific studies that have been judged of value (as indicated by the fact that these articles have been cited in a variety of more recent publications). Several of Hartesveldt's publications have been included in standard, selective subject bibliographies, e.g., in Ronald J. Fahl's North American Forest and Conservation History: A Bibliography (Santa Barbara, Calif.: ABC-Clio Press, 1977).

Abstract

Reports a series of ecological studies on the role of fire as it influences reproduction of the giant sequoia. Litter removal by fire was found to facilitate the growth of seedlings; fire was found not to detrimentally affect the numbers and variety of animals in this ecosystem. The judicious use of prescribed fires to manage the giant sequoia is suggested and justified.

Name _____

Section _____ Instructor _____

RESEARCHING THE SCIENCES: THREE SHORT SEARCHES

Introduction

The research process in the sciences is cumulative. The discoveries made today build upon those made yesterday and, in turn, lead to the discoveries of tomorrow. The purpose of every research experiment is directed by those that have preceded it, and all scientific research is, in some sense, a response to the discoveries of previous investigations. When conducting an experiment, a scientist must demonstrate an awareness of previous research, and must also publish the results of the new research as quickly as possible, so that other scientists may benefit from it.

The literature of the sciences demonstrates this knowledge-building process: it cumulates very rapidly, and is constantly being updated. The most desirable information on a scientific topic is usually that which has been most recently produced; as a result, scientists depend upon reports of scientific research published as journal articles (which can be produced quickly) much more than upon reports contained in books (which take longer to write and publish). Even journal articles are sometimes too delayed to meet the scientist's need for the most current information. Thus, other means of more rapid communication between scientists have developed to supplement dependence on the journal article as the primary mode of information exchange. These include: verbal reports at conferences, where scientists describe experiments in progress; technical reports, published and made available as soon as an experiment is concluded and prior to publication in a journal issue; use of tools that list contents of newly published journal articles (e.g., the Current Contents series); and direct, informal communication with colleagues in networks called "invisible colleges."

This assignment demonstrates three methods of locating literature of interest to scientists. All three of the searches are on the same topic, but each is a self-contained unit. Each search focuses on the journal literature, since the largest proportion of the literature of science is in journal article format.

Short Search #1 involves evaluation. Evaluation of the literature of the sciences is often difficult because the evaluation must be as current as the research evaluated, or the evaluation is not helpful. The review article, appearing in annually published collections of reviews, is a favored method of evaluation. The review article considers publications that pertain to an entire research specialization, places the many studies that have been done on this topic in relation to each other, and can be very current. Scientific experiments are evaluated on the basis of their results and methodology. If an experiment is important and demonstrates an hypothesis that has proven valuable to a research area, it will be included in the review article. If an experiment is judged trivial, or to have been poorly designed or poorly executed, it will not.

Short Search #2 explores a method of identifying scientific literature that does not depend upon subject terms. Because every scientific experiment builds upon those that have preceded it, people publishing results of research in a specified field make references to previously published work in that area. Thus, an important study or experiment is likely to be used as a bibliographic reference in reports of subsequent studies or experiments. Science Citation Index is an indexing tool that uses this cumulative aspect of scientific research to enable the researcher to locate relevant articles by identifying later articles that cite important, previously-published studies. Short Search #2 exposes you to this method of tracing research using key bibliographic references.

Short Search #3 examines a perennial problem facing researchers who require the most recent literature. The most recent issue of an indexing or abstracting tool does not cover the most recently published literature, but, rather, that published a short while ago. Short Search #3 examines the effect of this time lag, and what can be done about it.

A66

Notice that some of this assignment takes place at a worktable labelled "Researching the Sciences" in the Reference Room Alcove.

YOUR TOPIC FOR THIS ASSIGNMENT

Circadian rhythms are the daily rhythmic processes within an organism that occur independently of external signals. Circadian systems account for most of the daily rhythmicity seen in nature, including sleep and wakefulness, body temperature, motor performance, etc. You are interested in investigating this phenomenon.

SHORT SEARCH #1: EVALUATION OF STUDIES IN ANNUAL REVIEWS

A review article in an annual review publication comments on and interprets current research on a topic, discussing and integrating the results of recent research into the context of previous investigations so that it can be evaluated against the research that preceded it. Review articles include extensive bibliographic references directing you to the published work of key researchers. Only work that is judged to be contributive is included in review articles.

Examine the annual review volumes on the worktable. Find the chapter in the appropriate volume that pertains to research on circadian rhythms.

A. Using the Annual Review to Identify a Review Article on This Topic

1. Annual review publication that includes a chapter on the topic

   a. Title: _____

   b. This is an annually published title. The volume you are using is vol._____ for the year_____.

2. Review article on the topic

   a. Title of review article: _____

   b. Author(s) of review article: _____

   _____

   c. Pages on which review article appears: _____

   d. Number of references cited: _____

B. Identifying a Reference to an Article on This Topic

1. Carefully examine citation #84 in the "Literature Cited" bibliography at the end of the review article. Citation #84 is a reference to a journal article by T. L. Page, P. C. Caldarola, and C. S. Pittendrigh. Record complete bibliographic information identifying this publication in the space below; use *no* abbreviations. (NOTE: Use the Bibliographic Guide for Editors and Authors, which is on the worktable, to identify the full periodical title from the abbreviation that may be used for it.)

   _____

   _____

   _____

2. Is the journal article in Feinberg Library? ___yes; ___no. (NOTE: In this Library, the Kardex File records for periodical titles that include the name of an organization are filed as though the organization name were the first part of the title.)

   If yes, in what form? ___bound; ___unbound; ___in microform

C. Examining How a Review Article Evaluates Research Studies

This citation (#84) is mentioned in the text of the review article in the third paragraph on page 508. Locate this section of the text.

1. What does the text tell you about the cited item?_____

_____

2. How do annual reviews help evaluate published research studies?_____

_____

_____

D. How Annual Review Publications Are Accessed Through the Subject Card Catalog

Use the *Author/Title* Card Catalog to identify the subject heading given this volume of reviews. The form subdivision used with the main subject heading is one typically assigned to afford access to annual reviews.

_____ -- _____

main subject heading -- form subdivision

SHORT SEARCH #2: SCIENCE CITATION INDEX

Science Citation Index has three parts: the Citation Index section, the Source Index section, and the Permuterm Subject Index section. By using the first two sections together, you can begin an information search with a published article and discover who has used that article as a reference in a later paper or article. The Citation Index section lists authors (and their publications) who have been used as references. The Source Index section lists the authors who wrote the later papers using references to the earlier work of the authors in the Citation Index section.

A. Beginning Your Search With an Article on the Topic

Assume that in your search for materials on circadian rhythms, you have somehow located the photocopied article labelled with your topic on the worktable. The article is relevant to the topic, but is, by now, a little dated. You would like to update the information represented in the article and find out who else is doing research in the same field.

Following the style specified by Turabian's Manual, write a bibliography citation for the photocopied article:

_____

_____

_____

_____

B. Using the Citation Index Section to See Who Has Cited the Article

Look up the first named author of the original photocopied article in the Citation Index section of Science Citation Index for 1981 (on the worktable). Notice that Science Citation Index assigns a unique number to each column, rather than printing page numbers.

1. This author, and this original article, is listed in column number:_____

   The fact that the author and this article appear in the Citation Index section indicates that the article was a reference in another author's 1981 publication.

2. Record the name of an author who used the original author's article in a journal article:_____

3. Where was this second, citing article published?
   a. Full journal title. (Check "Source Publications and Publisher Guide," pp. 54-74 in vol. 7 to identify full periodical title from abbreviation used):

   _____

   b. volume number: _____; c. beginning page of article: _____; d. year: _____

   e. Is this journal article in Feinberg Library? ___yes; ____no

C. Using the Source Index Section to Get Full Information About the New Article
Look up this new source article on your topic in the Source Index section of the 1981 Science Citation Index under the new author's name.

1. This author, and the citing article, is listed in column number: _____
2. What is the title of this new article? _____

   _____

3. Does this new article seem relevant to your topic? _____
4. Compare the date of the original, photocopied article to that of the new article that cites it. Have you succeeded in updating your information? _____

SHORT SEARCH #3: CURRENT AWARENESS

Very few indexing or abstracting tools manage to cover the most recent six months of publication; yet, for a scientist, the most recent research is often the most important. A scientist must discover ways of staying aware of the research activity in his or her field.

A. Writing a Bibliography Citation for a Newly Published Article on the Topic
Examine the 17 September 1982 issue of Science on the worktable and find its article on circadian rhythms. Following the style specified by Turabian's Manual, write a bibliography citation for this article:

_____

_____

_____

_____

B. Discovering the Problems Posed by the Time Lag
Science Citation Index provides indexing for articles published in issues of Science. Locate the *most recent* issue of Science Citation Index (Index Area Ref.Z7401.S365). Could you have located *this* specific article by using Science Citation Index?
___yes; ___no

C. Ways of Staying Current in a Scientific Research Field
What does a scientist have to do to stay aware of the most current information in his or her field?

_____

_____

_____

_____

_____

A69

Name _____

Section _____ Instructor _____

RESEARCHING THE SCIENCES: THREE SHORT SEARCHES--ALTERNATIVE ASSIGNMENT

If your topic concerns a scientific subject, you may use this assignment to locate materials that pertain to your Topic Tracer topic and that you may want to incorporate into your final project for this course.

Introduction

The research process in the sciences is cumulative. The discoveries made today build upon those made yesterday and, in turn, lead to the discoveries of tomorrow. The purpose of every research experiment is directed by those that have preceded it, and all scientific research is, in some sense, a response to the discoveries of previous investigations. When conducting an experiment, a scientist must demonstrate an awareness of previous research, and must also publish the results of the new research as quickly as possible, so that other scientists may benefit from it.

The literature of the sciences demonstrates this knowledge-building process: it cumulates very rapidly, and is constantly being updated. The most desirable information on a scientific topic is usually that which has been most recently produced; as a result, scientists depend upon reports of scientific research published as journal articles (which can be produced quickly) much more than upon reports contained in books (which take longer to write and to publish). Even journal articles are sometimes too delayed to meet the scientist's need for the most current information. Thus, other means of more rapid communication between scientists have developed to supplement dependence on the journal article as the primary mode of information exchange. These include: verbal reports at conferences, where scientists describe experiments in progress; technical reports, published and made available as soon as an experiment is concluded and prior to publication in a journal issue; use of tools that list contents of newly published journal articles (e.g., the Current Contents series); and direct, informal communication with colleagues in networks called "invisible colleges."

This assignment demonstrates three methods of locating literature of interest to scientists. All three of the searches are on the same topic, but each is a self-contained unit. Each search focuses on the journal literature, since the largest proportion of the literature of science is in journal article format.

Short Search #1 involves evaluation. Evaluation of the literature of the sciences is often difficult because the evaluation must be as current as the literature it evaluates, or the evaluation is not helpful. The review article, appearing in annually published collections of reviews, is a favored method of evaluation. The review article considers publications that pertain to an entire research specialization, places the many studies that have been done on this topic in relation to each other, and can be very current. Scientific experiments are evaluated on the basis of their results and methodology. If an experiment is important and demonstrates an hypothesis that has proven valuable to a research area, it will be included in the review article. If an experiment is judged trivial, or to have been poorly designed or poorly executed, it will not.

Short Search #2 explores a method of identifying scientific literature that does not depend upon subject terms. Because every scientific experiment builds upon those that have preceded it, people publishing results of research in a specified field make references to previously published work in that area. Thus, an important study or experiment is likely to be used as a bibliographic reference in reports of subsequent studies or experiments. Science Citation Index, and Social Sciences Citation Index, are indexing tools that use this cumulative aspect of scientific research to enable the researcher to locate relevant articles by identifying later articles that cite important, previously-published studies. Short Search #2 exposes you to this method of tracing research using key bibliographic references.

Short Search #3 examines a perennial problem facing researchers who require the most current literature: the time lag in indexing and abstracting services. The most recent issue of an abstracting tool, for example, does not cover the most recently published literature; rather, it covers literature published a short while ago. The time lag is the period of time between an article's publication and its inclusion in an indexing or abstracting tool. Short Search #3 examines the effect of the time lag, and what can be done about it.

Briefly state your Topic Tracer topic, just to remind me what you're doing:

_____

SHORT SEARCH #1: EVALUATION OF STUDIES IN ANNUAL REVIEWS

A review article in an annual review publication comments on and interprets current research on a topic, discussing and integrating the results of recent research into the context of previous investigations so that it can be evaluated against the research that preceded it. Review articles include extensive bibliographic references directing you to the published work of key researchers. Only work that is judged to be contributive is included in review articles.

Use the Subject Card Catalog to locate an annual review publication that contains a review of research pertaining to your topic. To do this, consult the Subject Card Catalog under the Library of Congress subject heading that represents your area of interest, and add the form subdivision --COLLECTED WORKS, or the form subdivision --YEARBOOKS. Annual review volumes summarize the literature of a *research field* or *discipline*; therefore, your main subject heading should be somewhat broad (e.g., POWER RESOURCES--YEARBOOKS (rather than, for example, SOLAR COLLECTORS--YEARBOOKS); or PSYCHOLOGY--COLLECTED WORKS (rather than, for example, HYPNOTISM--COLLECTED WORKS). If you have difficulties locating an annual review publication suitable to your topic, I'll be glad to help!!

A. Using the Annual Review to Identify a Review Article on Your Topic

1. Complete subject heading used in the Subject Card Catalog:

   _____

2. Annual review that includes consideration of your topic:

   a. Title: _____

   b. Call number: _____

3. At the back of most annual review volumes, there is a cumulative listing of the contents of some previous volumes in that series. Use this listing, or other indexes in the volumes, to locate a review article that pertains to your topic.

   a. Title of review article:

   _____

   b. Author(s) of review article:

   _____

   c. Volume number or year of annual review: _____; pages on which review article appears: _____

B. Identifying a Reference to a Publication on Your Topic

Typically, a review article is laid out in sections, with a table of contents to guide you to the most appropriate section to consult, given the focus of your topic. Locate a section in the review that considers some aspect of your research topic and,

A71

from this section, select a reference to a publication relating to your topic. Turn to the references given at the end of the review article for full bibliographic information about that publication. Record below the complete bibliographic information that identifies this publication. Use no abbreviations. (Use the Bibliographic Guide for Editors and Authors, which is on the "Researching the Sciences" worktable in the Alcove of the Reference Room, to identify a full periodical title from the abbreviation that may be used for it.)

Complete bibliographic information identifying your publication:

_____

_____

_____

C. Examining How a Review Article Evaluates Research Studies
What does the text of the review article tell you about this publication? How do annual review articles help you to evaluate published research studies?

_____

_____

_____

SHORT SEARCH #2: CITATION INDEXES

Both Science Citation Index, and Social Sciences Citation Index, have three parts: the Citation Index section, the Source Index section, and the Permuterm Subject Index section. By using the first two sections together, you can begin an information search with a publication and discover who has used that publication as a reference in a later paper or article. The Citation Index section lists authors (and their publications) who have been used as references. The Source Index section lists the authors who wrote the later papers using references to the earlier work of the authors in the Citation Index section.

Suppose that the publication you identified through your annual review (i.e., the one about which you recorded bibliographic information in B of Short Search #1) is useful to you. But now you would like to update the information represented in that publication, and you would like to find out who has done more recent work in the same field of investigation.

Depending on the nature of your topic, select which of the citation indexing tools you are going to use (check one):

___ Science Citation Index (Index Area Ref.Z7401.S365)
___ Social Sciences Citation Index (Index Table 4)

Locate the tool. Use the Citation Index section of one or more years of the tool to look up the author and *this particular publication* to see if it has been cited more recently in a newer article.

A. Using the Citation Index Section to Determine Who Has Cited Your Publication
Notice that these citation indexing tools assign a unique number to each column rather than printing page numbers.

1. This publication by this author is listed in column number_____ of (year or issue number)_____ of the Citation Index section.

2. Record the name of an author who used the original author and his publication in a more recently published *periodical article* (i.e., not a book):

_____

3. Where was this citing article published?

a. Full periodical title. (Check the "Source Publications and Publisher Guide" in the front part of the Source Index section, or the separately published list of source publications, to identify a full periodical title from the abbreviation used for it.)

_____

b. Volume number:_____; c. beginning page:_____; d. year:_____

e. Is the journal title owned by Feinberg Library? ___yes; ___no.
NOTE: In the Kardex File of Periodicals, periodical titles that include the name of an organization are filed as though the organization name were the first part of the title.

B. Using the Source Index Section To Get Full Information About the New Article
Look this new source article up in the Source Index section under the new author's name.

1. This author, and the citing article, are listed in column number:_____

2. Title of the new article:_____

_____

3. Does this new article seem relevant to your topic? _____

4. Compare the date of the original publication to that of this article. Have you succeeded in updating your information? ___yes; ___no.

SHORT SEARCH #3: CURRENT AWARENESS

Very few indexing or abstracting tools manage to cover the most recent six months of publication; yet, for the scientist, the most recent research is often the most important. A scientist must discover ways of staying currently aware of the research activity in his or her field.

A. Writing a Bibliography Citation for a Newly Published Article on Your Topic
The Library subscribes to four titles in the Current Contents series: Current Contents: Agriculture, Biology and Environmental Sciences; Current Contents: Life Sciences; Current Contents: Physical and Chemical Sciences; Current Contents: Social and Behavioral Sciences.

Locate these periodicals on the current issues shelves in the Periodicals Room, and select one in the series as appropriate to your topic. Use the keyterm subject index in some recent issues to identify a *recently* published journal article on your topic.

1. Title of the Current Contents used:

_____

Date of issue used:_____; page on which your article is listed:_____

A73

2. Following the style specified by Turabian's Manual, write a correct bibliography citation for this new article on your topic:

_____

_____

_____

_____

B. Discovering the Problems Posed by the Time Lag

Go to the Reference Room and examine *the most recent* issue of one of the following indexing or abstracting tools (select the one that would be likely to include coverage of the article in the periodical you identified using Current Contents):

Applied Science and Technology Index (Index Table 6)
Biological Abstracts (Index Area Ref.QH301.B37)
Biological and Agricultural Index (Index Table 6)
Environment Index/Abstracts (Index Table 5)
Index Medicus (Index Area Ref.Z6660.I42)
Physics Abstracts (Index Area Ref.Q1.S3)
Psychological Abstracts (Index Table 5)
Sociological Abstracts (Index Table 4)

Assume that the periodical that contains your new article is indexed and/or abstracted by this tool. *Could* you have found out about *this* recently published article by using this tool? ___yes; ___no. If no, why not?_____

_____

C. Ways of Staying Current in a Scientific Research Field

What does a scientist have to do to stay aware of the most current information in his or her field?

_____

_____

_____

_____

_____

_____

A74

Name_____

Section_____ Instructor_____

RESEARCHING THE HUMANITIES

Introduction

Research in the humanities involves the discovery of relationships among the imaginative constructs created by individuals. The specific poem, painting, or sonata--reflections of unique minds--is the object of study. The humanist may attempt to discover meaning in the relationships between the different works of an artist, between the collected works of an artist and the works of other artists of the same period or school, or between the artistic creation that has preceded or that follows the work under study.

Explication of relationships between artifacts of the imaginative world often entails lengthy background discussion; thus, products of scholarly work in the humanities more frequently are published as books, rather than as journal articles. The humanistic researcher personally interacts with the object of study in establishing and articulating the relationships probed, bringing a unique perspective to understanding the work. In the humanities, in contrast to other areas of research, there is little likelihood that another researcher will examine the same relationships in precisely the same way, or from the same perspective. There is relatively little competition between researchers; the humanist is afforded time to reflect, time even to produce the definitive work over a period of years. This represents a situation quite different from that facing the scientist, for example, who must publish immediately in order to establish priority, and to contribute to the cumulative growth of scientific knowledge.

In doing this assignment, you will pursue materials that concern a single topic through the use of a variety of tools that identify literature important to the humanistic scholar. The search you accomplish is centered on books, although some journal literature is included toward the end of the search. The assignment exposes you to various types of tools and materials typical of humanistic research, and is comprised of these steps:

A. Humanistic research focuses upon single artistic creations, of the sort that often appear in collections or anthologies. Tools that afford access to the contents of books, therefore, are important to humanities research. You use one of these types of indexes to locate a copy of the subject of the search.

B. Through background reading on the artist who created the work you are investigating, some of the relationships become apparent. You use the ideas that represent some of these relationships to identify subject headings in the Subject Card Catalog that would lead you to additional information on the topic.

C. The evaluative phase of this assignment involves book reviews. Book reviews are a cortemporaneous assessment of a book, appearing shortly after its publication. Not really literary criticism (this process usually takes place later, after the book has been examined and evaluated by many scholars), a book review is, rather, an individual reaction to, or judgment of, a book's worth by a respected authority in the field. This assignment has you identify two reviews of a book on the topic.

D. Because the products of humanistic research are frequently published in books, an index to essays (i.e., to chapters in books) is particularly important. These chapters may contain criticism *about* an artist, or they may contain original, creative work *by* an artist. You use an index to essays to identify a chapter in a book *about* the topic.

E. You then use a periodical indexing tool to identify a periodical article relevant to research on the topic.

F. Finally: You implement what you have learned from this entire search process to describe how you would research another, similar subject in the humanities.

Notice that some of this assignment takes place at a worktable labelled "Researching the Humanities" in the Alcove of the Reference Room.

YOUR TOPIC FOR THIS ASSIGNMENT

You are going to write a paper on Ingmar Bergman, the film director/writer. The focus of your paper is on his 1956 movie "The Seventh Seal."

A. Using an Index to Collections of Reprints of Original Works and Writing a Footnote Citation

1. Using an Index to Collections of Original Works
The Drama Scholar's Index to Plays and Filmscripts is typical of indexes in the humanities that indicate locations of reproductions, or reprints, of works published in collections. An analogous tool in art, for example, would be an index to reprints of original art works published as parts of books.

Use volume 2 of The Drama Scholar's Index (on the worktable) to identify a book that includes a copy of Bergman's screenplay "The Seventh Seal."

a. Bergman's "The Seventh Seal" is listed on p._____

b. Title of book in which the screenplay is published:_____
Full bibliographic information about this book is given on p._____ of The Drama Scholar's Index.

2. Writing a Footnote Citation for a Part of the Screenplay
The book with the copy of the screenplay is on the worktable. Assume that, in writing your paper, you wish to refer to the dialogue that takes place between the Knight and Death on pages 111-113. Following the style specified by Turabian's Manual, write a *footnote citation* for these pages. (Note: Your footnote citation is for pages in a chapter in a book, and you will want to use Turabian 8:25 as a model; in incorporating information about the translators, refer to Turabian 8:12.)

_____

_____

_____

_____

B. Background Information About the Artist and Identifying Appropriate Subject Headings

1. Background Information About the Artist
Locate the article on Ingmar Bergman in The Film Encyclopedia (on the worktable). Based on the information supplied by the article, answer the following:

a. When was he born?_____ b. What is his nationality?_____

2. Identifying Appropriate Subject Headings
From what you now know about Bergman and his work, you have enough information to search the Subject Card Catalog for: a) books about him; b) books about films made in his country; c) books about themes prominent in Bergman's works. Under what subject headings *actually used* in the Subject Card Catalog would you find these books?

a. Books about him:_____

b. Books about films made in his country:_____

c. Women are a theme in many of Bergman's films. What subject heading would you use to identify books on how women are portrayed in films?

_____

A76

C. Evaluation: Identifying Book Reviews

Were you actually writing a paper, you would, at this point, find the most relevant books on your topic using the subject headings identified in section B. Assume that you have completed this process, and have decided to use the following book (on the worktable):

Young, Vernon. Cinema Borealis: Ingmar Bergman and the Swedish Ethos. New York: David Lewis, 1971.

Having decided that this book is relevant to your paper, you should then judge the quality of the information in the book: the book should be evaluated. Book reviews are important sources of evaluative information. A book review typically consists of a discussion and evaluation of the book, and an explanation of the reasons for the reviewer's judgment.

Read Feinberg Library Guide No. 8, "Finding Book Reviews: A Guide." Then, find these book review indexing tools in the Index Area of the Reference Collection:

Book Review Digest Index Area Ref.Z1219.C95
Book Review Index Index Area Ref.Z1035.A1B6

Use these book review indexing tools to identify two reviews of Young's book on Bergman. (Remember: Book reviews may appear one or more years after a book's publication; *and* you are looking for reviews of *this specific book on Bergman* by Young.)

1. A review of this book was published in:
   a. Periodical title (*in full*):_____
   b. Volume:_____ c. Page(s):_____ d. Date (*in full*):_____
   e. Reviewer's name (if given):_____

2. A review of this book was published in:
   a. Periodical title (*in full*):_____
   b. Volume:_____ c. Page(s):_____ d. Date (*in full*):_____
   e. Reviewer's name (if given):_____

3. Judging from the brief excerpts of reviews that accompany the Book Review Digest entries, was the book well received? Justify your answer.

_____

_____

_____

_____

D. Locating Essays in Books

Essay and General Literature Index is a tool that locates essays that have been published as parts of books, and covers a great many books published on subjects in the humanities. Use the volume of Essay and General Literature Index that provides indexing for books published between 1970 and 1974 (on the worktable) to locate an essay about Bergman's "The Seventh Seal."

1. Author of essay:_____ 2. Title of essay:_____

_____

3. Title of book in which essay was published:_____

_____ 4. Publisher:_____ 5. Year of publication:_____

6. Pages on which essay appears:_____

A77

E. Identifying Periodical Articles

Although the products of scholarly research in the humanities appear primarily in books, journal articles are still important. For research on films and film directors and their works, Film Literature Index provides extensive coverage of periodical titles about specific films and the motion picture industry.

Locate Film Literature Index in the Index Area of the Reference Room (Index Area Ref.Z5784.M9F45). Use volume 3 (1975) to identify a periodical article about Bergman's film "The Seventh Seal." Using no abbreviations, record below complete bibliographic information about this article:

F. Describing a Search Strategy for Research in the Humanities

In his film "Hamnstad" ("Port of Call," 1948), Bergman acknowledges the influence of Italian Neo-Realism through his use of documentary techniques. Assume you would like to pursue this connection further, particularly exploring the effect, if any, that the Italian Neo-Realist, film director, Vittorio De Sica had upon Bergman's work. Describe the best search strategy for conducting research on this topic.

A78

Name_____

Section_____ Instructor_____

RESEARCHING THE HUMANITIES: ALTERNATIVE ASSIGNMENT

If your topic concerns a subject in the humanities, you may use this assignment to locate materials that pertain to your Topic Tracer topic and that you may want to incorporate into your final project for this course.

Introduction

Research in the humanities involves the discovery of relationships among the imaginative constructs created by individuals. The specific poem, painting, or sonata--reflections of unique minds--is the object of study. The humanist may attempt to discover meaning in the relationships between the different works of an artist, between the collected works of an artist and the works of other artists of the same period or school, or between the artistic creation that has preceded or that follows the work under study.

Explication of relationships between artifacts of the imaginative world often entails lengthy background discussion; thus, products of scholarly work in the humanities more frequently are published as books, rather than as journal articles. The humanistic researcher personally interacts with the object of study in establishing and articulating the relationships probed, bringing a unique perspective to understanding the work. In the humanities, in contrast to other areas of research, there is little likelihood that another researcher will examine the same relationships in precisely the same way, or from the same perspective. There is relatively little competition between researchers; the humanist is afforded time to reflect, time even to produce the definitive work over a period of years. This represents a situation quite different from that facing the scientist, for example, who must publish immediately in order to establish priority, and to contribute to the cumulative growth of scientific knowledge.

In doing this assignment, you will pursue materials that concern a single topic through the use of a variety of tools that identify literature important to the humanistic scholar. The search you accomplish is centered on books, although some journal literature is included toward the end of the search. The assignment exposes you to various types of tools and materials typical of humanistic research, and is comprised of these steps:

A. Humanistic research focuses upon single artistic creations, of the sort that often appear in collections or anthologies. Tools that afford access to the contents of books, therefore, are important to humanities research. You become acquainted with at least one such tool that is useful to humanities research.

B. Through background reading on the artist who created the work you are investigating, some of the relationships become apparent. You use the ideas that represent some of these relationships to identify subject headings in the Subject Card Catalog that would lead you to additional information on your topic.

C. The evaluative phase of this assignment involves book reviews. Book reviews are a contemporaneous assessment of a book, appearing shortly after its publication. Not really literary criticism (this process usually takes place later, after the book has been examined and evaluated by many scholars), a book review is, rather, an individual reaction to, or judgment of, a book's worth by a respected authority in the field. This assignment has you identify a review of a book on your topic.

D. Because the products of humanistic research are frequently published in books, an index to essays (i.e., to chapters in books) is particularly important. These chapters may contain criticism *about* an artist, or they may contain original, creative work *by* an artist. You use an index to essays to identify a chapter in a book *about* your topic.

E. You then use a periodical indexing tool to identify journal articles on your topic.

F. Finally, you will use what you have learned from this assignment to describe how you would research another, similar topic in the humanities.

A79

Briefly state your Topic Tracer topic, just to remind me what you're doing:

_____

A. Indexes to Collections or Anthologies of Original Works

The titles listed below are some of the indexes in the Library that afford access to renditions, or copies, of original creative works. Select one of these indexes to explore for this part of the assignment. Try to select one that relates to your topic; if your topic does not exactly "fit" one of these, select one that is "close," or one that looks interesting to you.

Check the index you select:

___ American Periodical Verse (Ref.Z1231.P7I47)
___ Folk Song Index (Ref.ML128.F75B83)
___ Granger's Index to Poetry (on Ready Reference; ask for this at Reference Desk)
___ Index to Reproductions of American Paintings (Ref.ND105.S575)
___ Index to Reproductions of European Paintings (Ref.ND45.M6)
___ Periodical Fiction in English, 1965-1969 (Ref.PR821.M47)
___ Play Index (Index Table 2)
___ Popular Song Index (Ref.ML128.S3H4)
___ Science Fiction Short Story Index (Ref.Z5917.S36S5)
___ Short Story Index (Index Table 2)
___ Song Index (Ref.ML128.S3S31 1966)

1. Locate the index selected above. Examine it: look over the introduction, or the instructions for its use; browse through it. If it is directly useful to research on your topic, use it to locate something appropriate to that topic, e.g., a reproduction of a painting. If your topic doesn't exactly "fit" one of these indexes, be imaginative: use it to locate something that might be related if you were treating your topic from another angle...or to locate something that just plain interests you.

   Write down complete bibliographic information about what you have gained access to through the use of the index; e.g., if you have identified a poem, write down all the bibliographic information you would need to actually locate that poem.

   _____
   _____
   _____
   _____

2. Based on your examination of the index, summarize its important aspects: describe what it provides access to, how it does this, and how this type of tool is useful to the researcher:

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

A80

B. Subject Headings Typically Used in Humanistic Research

Basic background information is crucial to humanistic research: an article in a subject encyclopedia or a handbook will enumerate for you the various perspectives from which a topic has been examined. To do this part of the assignment, you will want to read some background information on your topic. To locate an appropriate background source to use, you may either: a) use the background source you identified and used in doing your Topic Tracer Part I; or b) locate a source through the Subject Card Catalog, implementing what you know about using the appropriate form subdivision to identify a background source; or c) browse through the Reference Collection in the appropriate Library of Congress classification(s) that relate to your topic.

1. Title of background source:

_____

Call number:_____ Material on your topic is on p._____ (in vol.___)

2. Having read the material in your background source, you are now ready to explore the Subject Card Catalog for the range of subject headings that provide access to books that treat your topic in its various dimensions. Use the Subject Card Catalog and Library of Congress Subject Headings to identify the specific subject headings that are *actually used in this Library's Subject Card Catalog* for books on your topic:

For a study of the	Subject heading to use
1. creative person (the artist)	1._____
2. art (the "thing" created)	2._____
3. form of art	3._____
4. period	4._____
5. movement	5._____
6. national tradition	6._____

NOTE: Depending on the nature of your topic, some of these levels of subject headings may not be appropriate, and you may adjust this list accordingly. You should, however, explore each possibility until you are satisfied that you have provided yourself access to *all* levels that would be relevant to a *thorough* search of the Subject Card Catalog for books on your topic.

C. Evaluation: Identifying Book Reviews

Reviews of newly published books are important sources of information about the value of a book to research on a topic. The review is most often written by an authority in the field treated by the book; it will convey to you a judgment as to the quality of the work, and will typically include an explanation of the reasons for the reviewer's judgment.

1. Book on your topic

Start with a book on your topic: either the one you located and cited on your Topic Tracer Part I, or one you locate through the Subject Card Catalog using subject headings you identified in B, above.

Following the style specified by Turabian's Manual, write a complete bibliography citation for this book:

_____

_____

_____

A81

2. Using Book Review Indexing Tools
Read Feinberg Library Guide No. 8, "Finding Book Reviews: A Guide." Locate and use an appropriate indexing tool to identify a review of this book on your topic. (You may, of course, want to locate more than one review, but only one is required.)

Book review indexing tool used:_____
Year_____

Your book was reviewed in:

a. Title of periodical (*in full*):_____

b. In volume:_____; on page(s):_____; date of issue (*in full*)_____

_____

c. If the periodical in which this review appears is in the Library, locate the review and read it. (You should be able to locate at least one review of your book that appears in a periodical that is in the Library.) Was your book well received? Justify your answer.

_____

_____

_____

_____

D. Locating Essays in Books
The Essay and General Literature Index is highly useful for locating essays that have appeared in books; it provides access to chapters on a broad range of persons and topics that are important to research in the humanities.

Use Essay and General Literature Index to identify an essay that pertains to your topic, and supply the following information about it: (Note: volumes of Essay and General Literature Index are on Index Table 2; a few of the volumes are temporarily on the "Researching the Humanities" worktable in the Alcove of the Reference Collection.)

1. Author of essay:_____
2. Title of essay:_____
3. Title of book in which essay appears:_____

_____

4. Publisher:_____ 5. Date of publication:_____
6. Pages on which essay appears:_____

E. Locating Criticism and Discussion in Journal Articles
Although the products of scholarly research in the humanities appear primarily in books, journal articles are still important to the humanistic scholar. An index to periodicals in the appropriate field provides access to criticism and discussion about the artist and, frequently, about particular artistic works by that person.

Select one of the following indexing and abstracting tools, as is appropriate to your topic (check the one you use):

___ Abstracts of English Studies (Index Area Ref.Z5781.C8)
___ Annual Bibliography of English Language and Literature (Index Area Ref.Z2011.M69)
___ Art Index (Index Table 1)
___ Cumulated Dramatic Index (Index Area Ref.Z5781.C8)
___ MLA International Bibliography (Index Area Ref.P1.M63; for articles on languages and literatures)

(list continued on next page)

___ Music Index (Index Area Ref.ML118.M84)
___ Philosopher's Index (Index Area Ref.B53.B54)
___ RILM Abstracts (Index Area Ref.ML1.I83; for publications on music)

Use the tool you have selected to identify a publication of importance to your topic, preferably a journal article. Record below complete bibliographic information about this publication; use no abbreviations.

Is this publication available in Feinberg Library? ___yes; ___no

F. The Process of Research in the Humanities

Suppose that, through your research, you become interested in one of the artists who lived at the same time as the artist you are studying. One of the more interesting investigations in the humanities is to discover precisely how one artist influences another. Did the artist contemporary to your artist influence your artist's work? If so, was the influence positive or negative?

Based on your background reading, choose an artist who was a contemporary of the artist with whom your topic is concerned, and who might have had an effect on your artist's work. Describe the steps you would take in doing research on the effects this artist may have had.

Feinberg Library/PSUC LIB101 (A83)

Name _____

Section _____ Instructor _____

IMPORTANT: *Complete* this prior to meeting with me for your consultation. *Bring* this *and* your Topic Tracer Part I with you to our meeting.

Your consultation with me is on _____ (date); at _____ (time)

TOPIC TRACER PART II

Introduction

In this course, you have learned basic skills necessary to efficiently identify and effectively use a considerable variety of library resources. You have been encouraged to be thoughtful in your use of the various tools to which you have been exposed: to think about the types of information to which they provide access, to think about how the tools interrelate with each other to afford a range of access to various types of information. You have been introduced to the process of developing and executing a search strategy, an orderly set of steps for exploring the library for materials on a given topic. You have been exposed to some of the factors you need to consider as you evaluate the quality and value of the materials to which you gain access. And you have learned about some of the features that distinguish research in each of the three main areas of scholarship: the social sciences, the sciences, and the humanities.

In the process of doing this second part of your Topic Tracer, and as you formulate your final bibliography, you will have the opportunity to coordinate and implement much of what you have learned about using and exploiting library systems and resources.

With the Topic Tracer Part II, you will complete your execution of the search for materials on your topic that you began earlier in the semester. Topic Tracer Part I had you locate information on your topic in a suitable background source which you used to focus on a problem, issue, or specific set of questions. You then cited at least one work on your topic recommended by your background source. In doing Topic Tracer Part II, you will further explore the Library for additional materials on your topic: books, scholarly journal articles, government documents, newspaper reports, chapters in books, and other materials that may be appropriate. Your final project--your selective bibliography of well-chosen library materials along with your two Topic Tracers--will reflect your success in interacting with library systems and tools in ways that are suitable and effective.

Prior to beginning work on Topic Tracer Part II, you will want to review your Topic Tracer Part I.

Things To Think About As You Do Topic Tracer Part II

Both parts of your Topic Tracer function together as a record of your search process. As you do each step of this part, thoughtfully reflect not only on how to best execute that particular step, but also on how that step contributes to the total search process. Ask yourself questions such as the following: 1) Am I getting all that I can out of this tool, i.e., do I understand how it functions so that I can use it with maximum effectiveness?; 2) To what types of materials am I gaining access by using this tool?; 3) How do these different types of materials relate to each other?; 4) Am I selecting materials that are really useful to research on this topic, i.e., are they materials that have both relevance and quality?; 5) Am I locating recently published pertinent materials, as well as older, but still basic ones?; and 6) Have I adapted my search strategy so that it is suitable to researching in the area of scholarship to which my topic pertains, i.e., the social sciences, the sciences, or the humanities?

Directions: Follow the steps outlined below to continue your search for materials on your topic. Your selective bibliography will be a list of citations to the materials you have identified through this search process and have personally judged to be of relevance and quality for research on your topic. You are welcome to incorporate into this Topic Tracer work that you did on your "Access to Periodical Literature" assignment; if you did any of the alternative assignments, you are welcome to incorporate that work as well.

STEP I: Finding Books on Your Topic

Use Library of Congress Subject Headings in conjunction with the Subject Card Catalog and the subject headings noted on catalog cards and select the *best* subject headings for accessing books in the Library on your topic. List the most important subject headings for your topic below; list only those *actually used* in the Library's Subject Card Catalog. List as many as are important to finding books on your topic, but at least three or four. Put a checkmark next to those that are, in your judgment, most relevant and most useful.

___ 1. _____

___ 2. _____

___ 3. _____

___ 4. _____

___ 5. _____

___ 6. _____

You may use the space below to record full bibliographic information about the books you identify (optional):

_____

_____

_____

_____

_____

_____

_____

_____

STEP II: Finding Journal Articles

Identify at least two academic periodical indexing and abstracting tools (i.e., do *not* use Readers' Guide) that are the best tools for locating journal articles on your topic. It is preferable that your choices include one *indexing tool* and one *abstracting tool*. Refer to your handout "Selective Subject Guide to Indexing and Abstracting Tools" to help you select tools appropriate to your topic. Use the tools you select carefully, thoughtfully, and even imaginatively and, for each, list the subject headings used in those tools that are pertinent for accessing articles on your topic. (If you are *thoroughly* satisfied with your selection and search of indexing and abstracting tools that you did on your "Access to Periodical Literature" assignment, you may incorporate that work onto this sheet.)

A. Title of tool used: _____

Pertinent subject headings:

1. _____

in vol./issue/or date: _____

2. _____

in vol./issue/or date: _____

3. _____

in vol./issue/or date: _____

B. Title of tool used: _____

Pertinent subject headings:

1. _____

in vol./issue/or date: _____

2. _____

in vol./issue/or date: _____

3. _____

in vol./issue/or date: _____

You may use the space below to record full bibliographic information about the materials you identify (optional):

_____

_____

_____

_____

_____

_____

_____

_____

_____

A86

STEP III: Supplementary Sources

Consider the use of these sources for access to materials on your topic:

New York Times Index (Index Area Ref.AI21.N44)
Essay and General Literature Index (Index Table 2)
Monthly Catalog of United States Government Publications (Government Documents Room)
Resources in Education (Index Table 3)

Select one (or more) of the above tools as an appropriate source(s) of access to materials on your topic (depending on the nature of your topic, you may well want to use several of these). List the most pertinent subject headings used in the tool(s) for accessing materials on your topic.

A. Title of tool used: _____

Pertinent subject headings:

1. _____
   in vol./issue/date: _____
2. _____
   in vol./issue/date: _____
3. _____
   in vol./issue/date: _____

B. Title of tool used: _____

Pertinent subject headings:

1. _____
   in vol./issue/date: _____
2. _____
   in vol./issue/date: _____
3. _____
   in vol./issue/date: _____

You may use the space below to record full bibliographic information about the materials you identify (optional):

_____

_____

_____

_____

_____

_____

_____

A87

STEP IV: Reflecting on Your Search

Think back over all the steps you have taken in your search for materials on your topic, i.e., all the steps you have gone through in doing both parts of your Topic Tracer. Summarize below your thoughts and reflections about the entire search process you have now executed. You may find it useful to try to summarize your search as a whole; you may wish to focus on how each step of the search has functioned to provide access to various types of information sources; you may want to reflect on why you encountered difficulties at particular steps in the search, and what that may mean; you may wish to address some of the questions posed in the "Things to Think About..." section on page 2 of this assignment. Our primary interest is in having you be thoughtful about the meaning the entire search process has had for you.

GENERAL SEARCH STRATEGY compared with research strategies in the SOCIAL SCIENCES, the SCIENCES, and the HUMANITIES

General Search Strategy	Social Sciences	Sciences	Humanities
Background information			
background reference sources, e.g., subject encyclopedias	good coverage in subject encyclopedias	fair coverage in subject encyclopedias	not many subject encyclopedias, but many handbooks that function as subject encyclopedias
specialized bibliographies	many specialized bibliographies; important sources	very few specialized bibliographies (literature of science advances too rapidly)	many specialized bibliographies; many of these are focused on particular individuals
Extensive information			
books	a substantial portion of the literature of social sciences is in books	most of scientific literature is in journal articles; most books in science are texts, treatises, or compilations of data	books are the primary literature of the humanities; have to use a range of subject headings to access books on various levels of analysis
journal articles	a substantial portion of the literature of social sciences is in journal articles	very important; recency in science is a crucial factor: supplement use of indexing & abstracting tools with Current Contents	though much of the humanities literature is in books, journal articles still important, especially for criticism
review publications: as tools that summarize & provide access to extensive information	important in the more scientific social sciences: anthropology, psychology, sociology	very important in all scientific research areas	none
Fact information	many subject dictionaries, yearbooks, statistical sources	many subject dictionaries, books of tables, yearbooks, handbooks	many yearbooks; many handbooks

Evaluation of sources located

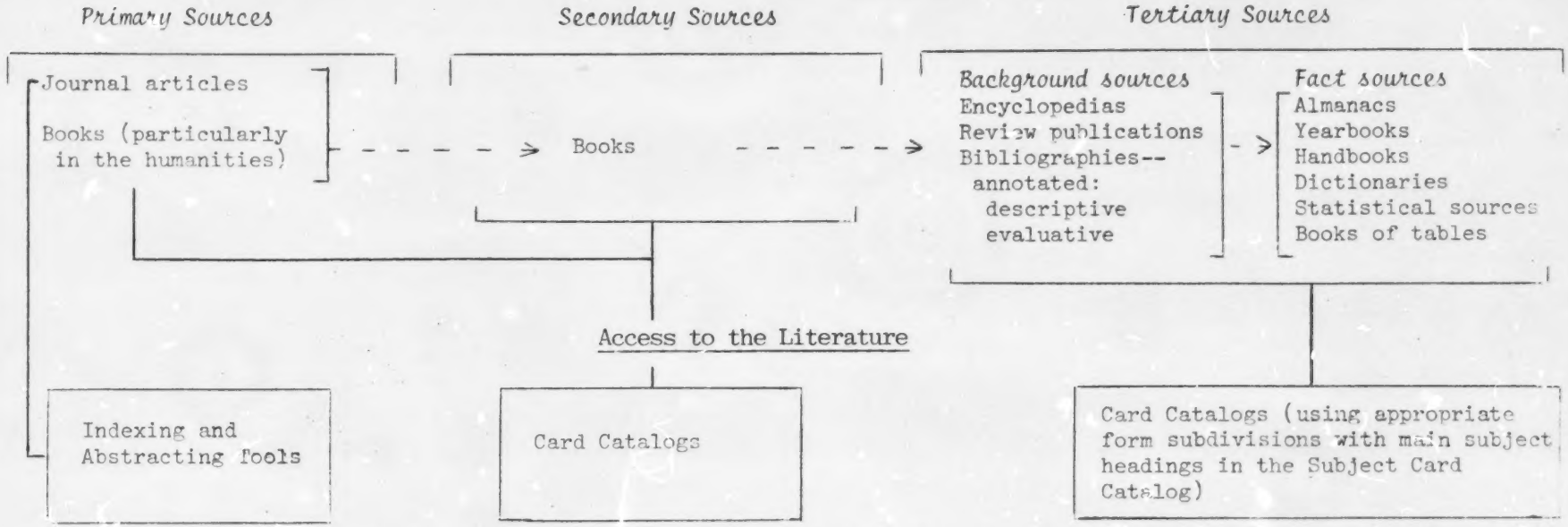
Once you have located materials relevant to your topic, you want to evaluate them to assure yourself that they have value for research on that subject. To evaluate your materials, you use several of these methods in combination, as appropriate:

1. For books, use information on catalog card: does the book have a bibliography? is it a recent publication?
2. Inspect the material: is it scholarly? are footnotes used? if a statement of opinion, on what is the opinion based?
3. Find biographical information about the author(s): what are his/their credentials for writing on this topic?
4. Determine whether the publication has been included in a specialized bibliography on a subject that includes your topic
5. Determine whether the publication has been included in a review article
6. Use a citation index to determine whether the author(s) has had his work (either the one you are evaluating, or others) cited by persons writing at a more recent date.

A88

THE FLOW OF SCHOLARLY COMMUNICATION, MEANS OF ACCESS TO THAT LITERATURE, AND THE EVALUATIVE PROCESS

The Literature



The Evaluative Process

can check at time of, or shortly after, publication:

a. book reviews
b. credentials of author

→

about 2-5 yrs. after publication

a. included in a review of research (review publication)
b. cited by authors publishing new journal articles and books

→

7-10 years and later after publication

a. included in a selective bibliography
b. incorporated as "generally accepted knowledge" in a reference source
c. cited by authors in new publications

A89

→ → → →